

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE			
10-5-85		B. Cotcamp		B. SALDIVAR		6834		B.S		7	1			
AREA		TOPO MAP		STATE		COUNTY		TWP	RANGE	PPM	PARTY MANAGER			
UTAM		Bowknot Bend-15		VT.		Emery					W. Cassidy			
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
Key Knoll TRI-STA.										5317.6				Key Knoll TRI STA. EL. 5317.6 y - 82090 x - 2,372,180
	254	6815	110 53 17	+126	15.0	87° 43' 46"	-270.0	-255.8	5061.7		BS	+3757	-5679	(Scale)
	254	6815			+15.0	272 16 32	-270.6	-255.6	-255.33		BS			E.P.M. Rollway.
π	0				5.1	-		-5.1		5056.6	π	0	0	85,847 2,386,501
-II	1538		246 50 09	-	7.1	92 10	-58.1	-65.2		4996.5		-282	-1512	85.565 2,384,989
TP	5807	5806.1	338 17 46	-	12.6	91 -	-101.3	-113.9			TP	+5733	-919	91,580 2,385,582
TP	5807				12.1	269 -	-101.3	-113.4	-113.43	4948.1	TP			
	4310		166 01 41	+128	7.8	89° 30'	-37.6	-29.8	4918.2		BS	+4309	-88	
	4310				7.5	276 30	-37.6	-30.1	-29.93		BS			
	0				5.1	-		-5.1		4913.1	π	0	0	95,889 2,385,494
TP	5219		345 54 16	-	10.9	96 04	-6.1	-17.0			TP	+5218	-118	101,107 2,385,376
TP	5219				10.6	269 56	-6.1	-16.7	-16.83	4901.4	TP			
	3137		171 56 09	-	12.1	89° 50'	-9.1	+3.0	4904.4		BS	+3126	+259	
	3137				12.0	270 10	-9.1	+2.9			BS			
II--	3213		171 50 51	+128	12.3	89° 50'	+9.3	-3.0		4901.4		-3202	-260	101,031 2,385,375 J. 101,035 x - 2,385,370 T. 101,035
π	0				5.1	-		-5.1		4899.3	π	0	0	104,233 2,385,635
TP	5186		41 23 40	+12.5	10.1	91 40	-150.8	-160.9			TP	+3055	+4188	107,288 2,389,823
TP	5186				10.0	268 20	-150.8	-160.8		4743.6	TP			
	3099		291 40 53	+12.5	5.6	89° 20'	-36.1	-30.5	4713.0		BS	-1741	+2564	
	3099				5.3	270 40	-36.1	-30.8	30.83		BS			

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DATE	10-5-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S.	LINE NO.	7	PAGE	2	
AREA	UTAH	TOPO MAP	Bowknot Bend -15'	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									4713.0					
1	4816		105° 18'	+12.5	4.8	90° 44'	-61.6	-66.4		4,646.6		-2246	+4260	103.301 2,396,647 B.O.L. Line*
2	4488		104° 46'	~	5.5	90° 48'	-62.7	-68.2		4,644.8		-2056	+3989	103.491 2,396,376
3	4160		104° 17'	~	4.2	90° 54'	-65.3	-69.5		4,643.5		-1875	+3714	103.672 2,396,101
4	3832		103° 55'	~	5.6	90° 58'	-64.6	-70.2		4,642.8		-1705	+3432	103.842 2,395,819
5	3506		103° 15'	+12.5	6.2	91° -	-61.2	-67.4		4,645.6		-1523	+3158	104.024 2,395,545
6	3180		102° 15'	~	6.4	91° 04'	-59.2	-65.6		4,647.4		-1331	+2888	104.216 2,395,275
7	2855		101° 25'	~	5.3	91° 08'	-56.5	-61.8		4,651.2		-1157	+2610	104.370 2,394,997
8	2529		100° 14'	+12.5	5.2	91° 14'	-54.4	-59.6		4,653.4		-977	+2333	104.570 2,394,720
9	2202		99° 20'	~	5.3	91° 16'	-48.7	-54.0		4,659.0		-819	+2044	104.728 2,394,431
10	1875		98° 10'	~	6.1	91° 16'	-41.4	-47.5		4,665.5		-662	+1754	104.885 2,394,141
11	1552		96° 05'	~	4.5	91° 26'	-36.1	-40.6		4,672.4		-495	+1471	105.052 2,393,858
12	1227		93° 35'	~	5.6	91° 30'	-32.1	-37.7		4,675.3		-340	+1179	105.207 2,393,566
13	912		89° 05'	~	5.5	91° 50'	-29.2	-34.7		4,678.3		-183	+893	105.364 2,393,280
14	607		79° 25'	+12.5	4.7	92° 10'	-22.9	-27.6		4,685.4		-20	+607	105.527 2,392,994
15	346		54° 05'	~	6.0	93° 10'	-19.1	-25.1		4,687.9		+138	+318	105.685 2,392,705 Between 15+16
16	301		353° 05'	~	4.2	93° 20'	-17.5	-21.7		4,691.3		+300	+29	105.847 2,392,416 $\Delta=0$ $S.I. = elev. 4767.9$ $S. = 105.547$ $X = 2,392,387$
17	526		317° 55'	~	4.2	91° 20'	-12.2	-16.4		4,696.6		+457	-260	106.004 2,392,127
18	826		305° 55'	~	4.1	90° 30'	-7.2	-11.3		4,701.7		+618	-548	106.165 2,391,839
19	1143		300° 35'	~	5.3	-	-	-5.3		4,707.7		+781	-835	106.328 2,391,552
20	1465		297° 30'	~	4.6	89° 50'	+4.3	-0.3		4,712.7		+942	-1122	106.489 2,391,265

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-5-85		B. Gtoamp		B. SALDIVAR		6834		B.S		7		3			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		Bowknot Bend -15		UTAM		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4713.0						
21	1789		295° 20'	+12.5	5.6	89° 46'	+10.4	+4.8		4717.8		+1097	-1413	106,644	2,390,974
22	2116		294° 10'	-	4.8	89° 34'	+16.0	+11.2		4724.2		+1264	-1697	106,811	2,390,690
23	2443		293° 05'	-	4.1	89° 30'	+21.3	+17.2		4730.2		+1422	-1987	106,969	2,390,400
24	2770		292° 10'	-	3.2	89° 26'	+27.4	+24.2		4737.2		+1576	-2278	107,123	2,390,109
25	3099		291° 41'	-	5.6	89° 20'	+36.1	+30.5		4743.5		+1741	-2564	107,288	2,389,823
26	3427		291° 10'	+12.5	4.2	89° 20'	+39.9	+35.7		4748.7		+1900	-2852	107,447	2,389,535
27	3756		290° 50'	-	2.4	89° 20'	+43.7	+41.3		4754.3		+2064	-3138	107,611	2,389,249
28	4085		290° 22'	-	4.1	89° 16'	+52.3	+48.2		4761.2		+2217	-3431	107,764	2,388,956
29	4414		290° 10'	-	5.3	89° 14'	+59.1	+53.8		4766.8		+2382	-3716	107,929	2,388,671
30	4743		289° 53'	+12.5	5.5	89° 12'	+66.2	+60.7		4773.7		+2540	-4005	108,087	2,388,382
31	5071		289° 40'	-	4.0	89° 12'	+70.8	+66.8		4779.8		+2700	-4293	108,247	2,388,094
32	5398		289° 42'	-	4.8	89° 04'	+87.9	+83.1		4796.1		+2876	-4568	108,423	2,387,819
33	5726		289° 30'	-	6.3	88° 50'	+116.6	+110.3		4823.3		+3034	-4856	108,581	2,387,531
34	6023	6021.2	290° 00' 32"	+12.1	6.6	88° 36'	+147.2	+140.6			TP	+3200	-5100	108,747	2,387,287
34	6023				10.7	271° 26'	+150.7	+140.0	+140.43	4853.4	TP				
	2126		33° 53' 16"	+12.1	7.3	91° 10'	+43.3	+50.6	4904.0		BS	-1477	-1529		
	2126				7.2	268° 50'	+43.3	+50.5			BS				
35	1802		32° 05'	-	4.2	91° 20'	-41.9	-46.1		4857.9		+1292	+1256	108,963	2,387,014
36	1478		30° 05'	-	4.1	91° 20'	-34.4	-38.5		4865.5		+1095	+992	108,366	2,386,750
37	1158		27° 10'	-	4.6	91° 14'	-24.9	-29.5		4874.5		+897	+733	108,168	2,386,491

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10-5-85		B. GtCamp		B. SALDIVAR		6834		B.S.		7		4			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Bowknot Bend-15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4904.0						
38	261		20° 10'	+12.1	6.6	91° -	-15.0	-21.6		4882.4		+ 728	+460	107,999	2,386,218
39	528		22° -	-	6.0	91° -	-9.2	-15.2		4888.8		+ 437	+296	107,708	2,386,054
40	208		34° 25'	-	5.3	91° -	-3.6	-8.9		4895.1		+143	+151	107,414	2,385,909
X	0				5.1	-		-5.1		4898.9	X	0	0	107,271	2,385,758
41	122		220° 30'	+12.1	4.6	89° 30'	+11.1	-3.5		4900.5		- 74	-97	107,197	2,385,661
42	448		227° 30'	-	3.8	89°	+7.8	+4.0		4908.0		- 227	-386	107,044	2,385,372
43	775		230° 10'	-	5.8	88° 30'	+19.8	+14.0		4918.0		- 361	-686	106,910	2,385,072
44	1097		234° 25'	+12.1	5.1	88° 26'	+20.0	+24.9		4928.9		- 437	-1006	106,834	2,384,752
45	1427		236° 50'	-	4.0	88° 20'	+41.5	+37.5		4941.5		- 513	-1332	106,758	2,384,426
46	1742		236° 39'	-	8.2	88° 20'	+50.7	+42.5			TP	-631	-1623	106,642	2,384,135
46	1742				8.1	271° 40'	+50.7	+42.6		4946.6	TP	+2			
	2632		20° 29' 09"	+11.9	2.2	89° -	-45.9	-43.7			BS	-2222	-1410		
	2632				9.4	271° 10'	-53.6	-44.2			BS	+2			
47	2303		26° 32'	-	5.6	89° 30'	+20.3	+14.7		4917.4		+1944	-1235	106,366	2,383,964
48	1974		-	-	4.0	89° 54'	+3.4	-0.6		4902.1		+1666	+1059	106,088	2,383,784
49	1645		-	-	5.3	96° 12'	-5.7	-11.0		4891.7		+1388	+882	105,810	2,383,607
50	1316		20° 57'	-	4.6	90° 34'	-13.0	-17.6		4885.1		+1106	+714	105,528	2,383,439
51	986		21° -	-	5.5	90° 50'	-14.3	-19.8		4882.9		+ 828	+536	105,250	2,383,261
52	657		21° 10'	-	5.5	90° 56'	-10.7	-16.2		4886.5		+ 551	+358	104,973	2,383,083
53	329		23° 30'	-	6.0	BM	-1.6	-7.6		4895.1		+268	+191	104,670	2,382,916

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10-5-85		B. Cotcamp		B. SALDIVAR		6834		B.S. W		7		5			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Bow Knot Bend-15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4902.7						
54	0				5.1	-		-5.1		4897.6	TP	0	0	104,422	2,382,725
55	330		209° 40'	+71.9	4.4	94° -	-23.0	-27.4		4875.3		-247	-219	104,175	2,382,506
56	660		210° 15'	-	5.0	92° 20'	-26.9	-31.9		4870.8		-489	-443	103,933	2,382,282
57	988		210° 05'	-	5.3	91° 14'	-21.3	-26.6		4876.1		-734	-661	103,688	2,382,064
58	1317		209° 32'	-	6.0	90° 34'	-13.0	-19.0		4883.7		-987	-872	103,435	2,381,853
59	1646		209° 15'	-	5.6	90° 12'	-5.7	-11.3		4891.4		-1239	-1083	103,183	2,381,642
60	1976		-	+11.9	4.2	90° 06'	-3.4	-7.6		4895.1		-1488	-1300	102,934	2,381,425
61	2306		-	-	3.8	89° 50'	+6.7	+2.9		4905.6		-1736	-1517	102,686	2,381,208
62	2635		209° 20'	-	6.4	89° 40'	+15.3	+8.9		4911.6		-1982	-1737	102,440	2,380,988
TP	2877		209° 16'	-	8.5	89° 40'	+16.7	+8.2			TP	-2166	-1894	102,258	2,380,831
TP	2877				8.2	270° 20'	+16.7	+8.5	+8.5	4911.1	TP				
	1847		28° 36' 41"	+11.9	7.1	88° 30'	-48.3	-41.2	4869.8		BS	-1404	-1199		
	1847				6.8	271° 30'	-48.3	-41.5	-41.5 avg.		BS		+2		
63	1761		28° 38'	-	5.4	88° 46'	+41.0	+35.6		4905.4		+1338	+1144	102,194	2,380,776
64	1432		-	-	2.4	89° 10'	+20.8	+18.4		4888.2		+1088	+931	101,944	2,380,563
65	1102		-	-	6.2	89° 20'	+12.8	+6.6		4876.4		+838	+716	101,694	2,380,348
66	772		28° 38'	-	5.0	89° 34'	+5.8	+0.8		4870.6		+587	+502	101,443	2,380,134
67	442		-	-	5.8	89° 34'	+3.3	-2.5		4867.3		+336	+287	101,192	2,379,919
68	113		-	-	6.5	89° 34'	+0.9	-5.6		4864.2		+86	+73	100,942	2,379,705
TP	0				5.1	-		-5.1		4864.7	TP	0	0	100,856	2,379,632

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10-5-85		B. Cotcamp		B. SALDIVAR		6834		B. S. W		7		6			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Bowknot Bend 15		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4869.8						
69	214		211 15	+11.7	3.9	91° 40'	-6.2	-10.1		4859.7		-156	-146	100,700	2,379,486
0	372		207° 43' 06"	~	6.1	91° 10'	-7.6	-13.7		4856.1	0	-287	-237	100,569	2,379,395 <sup>3</sup> - 100,600 X - 2,379,320 570 Oil Comp. DR'm Hole.
70	538		220 -	~	5.5	91° 20'	-12.5	-18.0		4851.8		-332	-423	100,524	2,379,209
71	848		229 15	~	5.8	91° 34'	-23.2	-29.0		4840.8		-409	-743	100,447	2,378,889
72	1168		233 45	~	4.0	91° 30'	-30.6	-34.6		4835.2		-482	-1064	100,374	2,378,568
73	1493		236 -	--	6.1	91° 20'	-34.7	-40.8		4829.0		-562	-1383	100,294	2,378,249
74	1820		237 30	+11.9	3.4	91° 08'	-36.0	-39.4		4830.4		-640	-1704	100,216	2,377,928
75	2148		238 40	~	5.6	90° 54'	-33.7	-39.3		4830.5		-715	-2026	100,141	2,377,606
76	2475		239 30	~	5.8	90° 46'	-33.1	-38.9		4830.9		-789	-2346	100,067	2,377,286
77	2801		240 -	~	5.8	90° 38'	-31.0	-36.8		4833.0		-870	-2662	99,986	2,376,970
78	3130		240 35	~	4.9	90° 38'	-34.6	-39.5		4830.3		-942	-2985	99,914	2,376,647
79	3454		240 53	~	4.6	90° 32'	-32.2	-36.8		4833.0		-1022	-3299	99,834	2,376,333
80	3787		241 10 46	~	4.5	90° 30'	-33.0	-37.5			TP	-1102	-3623	99,756	2,376,009
80	3787				4.0	269° 30'	-33.0	-37.0	-37.23	4832.6	TP				
	2277		84 14 26	+11.9	6.6	TH	-11.4	-4.8			BS	+244	-2264		
	2277				6.3	TH 276	-11.4	-5.1	-4.9	4827.7	BS				
81	1971		87 40	~	2.6	89° 50'	+5.7	+3.1		4830.8		-328	+1944	99,674	2,375,691
82	1645		88 27	~	3.7	89° 50'	+4.8	+1.1		4828.8		-296	+1618	99,706	2,375,365
83	1316		~	~	4.6	89° 50'	+3.8	-0.8		4826.9		-236	+1295	99,766	2,375,042
84	987		-	-	5.2	90° 30'	-8.6	-13.8		4813.9		-177	+971	99,825	2,374,718

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DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-5-85		B. Cotamp		B. SALDIVAR		6834		B.S. W		7		7			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Bowknot Bend-15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH -	EAST + WEST -		Y
									4827.7						
#	1052		87° 01' 09"	+11.9	4.7	89° 50'	+3.1	-1.6		4826.1		-163	+1039	99.839	2,374,786 H section marker
85	659		88° 27'	--	6.5	96° 30'	-5.8	-12.3		4815.4		-118	+648	99.884	2,374,395
86	330		--	--	5.7	91° 30'	-8.6	-14.3		4813.4		-59	+325	99.943	2,374,072
87	0				5.1	-		-5.1		4822.10	π	0	0	100.002	2,373,747
88	330		268° 27'	+11.9	6.2	74°	+1.7	-4.5		4823.2		+59	-325	100.061	2,373,422
89	660		--	--	5.6	89° 54'	+1.2	-4.4		4823.3		+119	-649	100.121	2,373,098
90	989		--	--	6.0	89° 54'	+1.7	-4.3		4823.4		+178	-973	100.180	2,372,774
91	1319		--	--	5.7	90° 04'	-1.5	-7.2		4820.5		+237	-1278	100.239	2,372,449
90	1648		268° 32' 04"	+12.2	13.8	-		-13.8			TP	+307	-1619	100.311	2,372,130
92	1648				13.5	270°		-13.5	4815.7	4814.1	TP	+2	+2		
	1360		88° 09' 10"	--	+5.4	89° 50'	-3.8	+1.6			BS	+234	-1279		
	1300				+5.3	270° 10'	-3.8	+1.5			BS	+2	+2		
93	970		88° 11'	--	5.5	91° -	-16.9	-22.4		4793.3		-175	+954	100.372	2,371,807
94	642		--	--	4.9	93° -	-33.6	-38.5		4777.2		-116	+631	100.431	2,371,484
95	313		88° 15'	-	5.9	93° 30'	-19.1	-25.0		4790.7		-57	+308	100.490	2,371,161
π	0				5.1	-		-5.1		4810.10	π	0	0	100.547	2,370,853
96	16		268° 30'	+12.2	5.5	-		-5.5		4810.2		+3	-16	100.550	2,370,837
97	346		270° -	--	3.4	93° -	-18.1	-21.5		4794.2		+73	-338	100.620	2,370,515
98	676		271° -	--	4.8	91° 20'	-15.7	-20.5		4795.2		+154	-658	100.701	2,370,195
99	1006		--	--	5.6	91° -	-17.6	-23.2		4792.5		+230	-979	100.777	2,369,874

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-5-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		8			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Bowknot Bend-15		UTAH		Emery								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4815.7						
100	1335		271° -	+12.2	4.3	-		-4.3		4811.4		+365	-1300	100.852	2,369,553
101	1665		270° 50'	--	3.2	89° 50'	+4.8	+1.6		4817.3		+375	-1622	100.922	2,369,231
102	1994		270° 20'	--	6.0	89° 30'	+5.8	-0.2		4815.5		+433	-1946	100.980	2,368,907
103	2315		268° 24'	--	5.8	89° 50'	+6.7	+0.9		4816.6		+426	-2276	100.973	2,368,577
104	2645		- - -	--	4.8	89° 50'	+7.7	+2.9		4818.6		+487	-2600	101.034	2,368,253
105	2974		268° 26' 36"	--	10.6	89° 44'	+13.8	+3.2			TP	+549	-2923	101.098	2,367,932
105	2974				10.3	270° 16'	+13.8	+3.5	+3.43	4819.1	TP	+2	+2		
	2301		88° 19' 08"	+12.2	12.0	-		+12.0			BS	+420	-2262		
	2301				11.7	270° -		+11.7	+11.9	4831.0	BS	+2	+2		
106	1972		88° 15'	--	5.4	90° 16'	-9.2	-14.6		4816.4		-358	+1939	101.162	2,367,611
107	1644		- - -	--	4.2	90° 20'	-9.6	-13.8		4817.2		-298	+1617	101.222	2,367,289
108	1316		- - -	--	5.0	90° 20'	-7.7	-12.7		4818.3		-239	+1294	101.281	2,366,966
109	987		- - -	+12.2	5.2	90° 20'	-5.7	-10.9		4820.1		-179	+971	101.341	2,366,643
110	658		- - -	--	4.4	90° 40'	-7.7	-12.1		4818.9		-119	+647	101.401	2,366,319
111	329		- - -	--	4.0	91° -	-5.7	-9.7		4821.3		-60	+324	101.460	2,365,996
112	0				5.1	-		-5.1		4825.9	TP	0	0	101.520	2,365,672
113	329		268° 04'	+12.2	5.7	89° 40'	+1.9	-3.8		4827.2		+59	-324	101.579	2,365,348
114	657		- - -	--	5.6	89° 20'	+7.6	+2.0		4833.0		+117	-646	101.637	2,365,026
115	987		- - -	--	4.0	89° 10'	+14.4	+10.4		4841.4		+176	-971	101.696	2,364,701
116	1317		- - -	--	5.6	89° -	+23.0	+17.4		4848.4		+235	-1296	101.755	2,364,376

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-6-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S. W	LINE NO.	7	PAGE	9	
AREA	UTAH	TOPOG MAP	Bowknot Bend-15	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									4831.0					
117	1645		268° 04'	+12.2	5.0	88° 40'	+38.3	+33.3		4864.3		+293	-1619	101,813 2,364,053
118	1975		-	-	3.8	88° 06'	+65.5	+61.7		4892.7		+352	-1943	101,872 2,363,729
TP	2254	2252.8	267° 53' 46"	+12.4	13.3	88° 06'	+74.7	+61.4			TP	+403	-2216	101,925 2,363,458
TP	2254				13.0	211° 54'	+74.7	+61.7	+61.6	4892.6	TP	+2	+2	
	764		88° 31' 39"	-	4.8	88° -	-26.7	-21.9	4870.7		BS	+145	-750	
	764				4.7	212° -	-26.7	-22.0			BS	+2	+2	
119	713		88° 14'	-	4.1	88° 14'	+22.0	+17.9		4888.6		-132	+701	101,940 2,363,411
120	386		88° 30'	-	5.2	91° -	-6.7	-11.9		4858.8		-73	+379	101,999 2,363,089
121	58		88° 15'	-	5.5	91° -	-1.0	-6.5		4864.2		-11	+57	102,061 2,362,767
π	0				5.1	-	-	-5.1		4865.6	π	0	0	102,072 2,362,710
122	266		268° 14'	+12.4	5.1	91° -	-4.6	-9.7		4861.0		+49	-261	102,121 2,362,449
123	596		-	-	5.6	91° 22'	-14.2	-19.8		4850.9		+110	-586	102,182 2,362,124
124	927		-	-	5.3	91° 20'	-21.6	-26.9		4843.8		+171	-911	102,243 2,361,799
125	1257		268° 41' 35"	-	5.1	91° 20'	-29.2	-34.3			TP	+242	-1233	102,316 2,361,479
125	1257				12.3	91° -	-21.9	-34.2		4836.5	TP	+2	+2	
	2226		88° 05' 31"	+12.4	7.6	91° 40'	+64.7	+72.3			BS	+405	-2188	
	2226				7.3	268° 20'	+64.7	+72.0	+72.23	488.7	BS	+2	+2	
126	1896		88° 19'	-	3.8	92° -	-66.2	-70.0		4838.7		-353	+1863	102,370 2,361,156
127	1567		-	-	4.3	92° 10'	-59.2	-63.5		4845.2		-291	+1540	102,432 2,360,833
128	1238		-	-	3.9	92° 20'	-50.4	-54.3		4854.4		-230	+1216	102,493 2,360,509

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-12-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		10			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Bowknot Bend-15		UTAH		Emery								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4908.7						
129	909		88° 22'	+12.4	5.2	92° 20'	-37.0	-12.2		4866.5		-170	+893	102,553	2,360,186
130	583		--	--	9.2	93° -	-30.5	-39.7		4869.0		-109	+573	102,614	2,359,866
131	250		--	--	3.6	92° 30'	-10.9	-14.5		4894.2		-47	+246	102,676	2,359,539
TP	0				5.1	-		-5.1		4903.6	TP	0	0	102,723	2,359,293
132	79		268° 07'	+12.4	5.4	91° 10'	-1.6	-7.0		4901.7		+14	-78	102,737	2,359,215
133	407		--	--	4.8	90° 30'	-3.6	-8.4		4900.3		+74	-400	102,797	2,358,893
134	735		--	--	4.6	-		-4.6		4904.1		+134	-723	102,857	2,358,570
135	1065		--	--	3.0	89° 20'	+12.4	+9.4		4918.1		+194	-1047	102,917	2,358,246
136	1395		268° 15' 06"	--	9.9	89° -	+24.3	+14.4			TP	+258	-1371	102,983	2,357,924
136	1395				9.6	271° -	+24.3	+14.7	+14.63	4923.3	TP	+2	+2		
	1317		88° 07' 21"	+12.4	14.0	BH	+6.6	+20.6	4943.9		BS	+241	-1295		
	1317				13.9	BH 210	+6.6	+20.5			BS	+2	+2		
137	988		88° 07'	--	6.2	91° -	-17.2	-23.4		4920.5		-180	+971	103,046	2,357,602
138	659		--	--	8.7	91° -	-11.5	-20.2		4923.7		-120	+648	103,106	2,357,279
139	330		--	--	5.1	91° -	-5.8	-10.9		4933.0		-60	+324	103,166	2,356,955
140	0				5.1	-		-5.1		4938.8	TP	0	0	103,226	2,356,631
141	330		268° 02'	+12.4	7.9	89° -	+5.8	-2.1		4941.8		+60	-325	103,286	2,356,306
142	659		--	--	4.8	89° -	+11.5	+6.7		4950.6		+119	-648	103,345	2,355,983
143	988		--	--	7.8	88° 40'	+23.0	+15.2		4959.1		+179	-972	103,405	2,355,659
144	1317		--	--	4.9	88° 16'	+42.1	+37.2		4981.1		+239	-1295	103,465	2,355,336

Bowknot Bend 15  
THE FLAT TOPS-15  
↓

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-12-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S. W	LINE NO.	7	PAGE	4	
AREA	UTAM	TOPO MAP	THE FLAT TOPS-15'	STATE	UTAM	COUNTY	Emery	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4943.9						
145	1646	1645.0	268° 11' 37"	+12.3	7.5	88° -	+57.4	+49.9	} 50.15		TP	+300	-1617	103,528	2,355,016
145	1646				7.2	272 -	+57.4	+50.2		4994.0	TP	+2	+2		
	1971		88° 03' 28"	-	12.2	84	+9.9	+22.1	} 506.1		BS	+354	-1939		
	1971				12.1	84 270	+9.9	+22.0		BS	+2	+2			
146	1642		88° 06'	-	7.9	90° 50'	-23.9	-31.8		4984.3		-296	+1615	103,588	2,354,694
147	1314		- -	-	10.2	91° 50'	-42.0	-52.2		4963.9		-237	+1292	103,647	2,354,371
148	985		- -	+12.3	14.9	92° 10'	-37.2	-52.1		4964.0		-178	+968	103,706	2,354,047
149	658		- -	-	11.2	92° 10'	-24.9	-36.1		4980.0		-119	+647	103,765	2,353,726
150	329		- -	-	12.6	91 -	-5.7	-18.3		4997.8		-59	+324	103,825	2,353,403
151	0				5.1	-		-5.1		5011.0	X	0	0	103,884	2,353,079
152	330		268° 06'	+12.3	7.4	89° 20'	+3.8	-3.6		5012.5		+60	-325	103,944	2,352,754
153	659		- -	-	10.9	89° 20'	+7.7	-3.2		5012.9		+119	-648	104,003	2,352,431
154	988		- -	-	8.9	89° 40'	+5.7	-3.2		5012.9		+178	-972	104,062	2,352,107
155	1317		- -	-	7.7	89° 40'	+7.7	-0.0		5016.1		+238	-1295	104,122	2,351,784
156	1646		268° 06'	-	6.1	89° 30'	+4.4	+8.3		5024.4		+297	-1619	104,181	2,351,460
157	1976		- -	+12.3	8.5	89° 10'	+28.7	+20.2		5036.3		+357	-1944	104,241	2,351,135
158	2305		- -	-	5.6	89° -	+40.2	+34.6		5050.7		+416	-2267	104,300	2,350,812
159	2634		268° 05'	-	8.5	89° 04'	+42.9	+34.4		5050.5		+475	-2591	104,359	2,350,488
160	2963		- -	-	6.4	89° -	+51.7	+45.3		5061.4		+534	-2914	104,418	2,350,165
T	3247		268° 00' 10"	-	4.8	89° -	+56.7	+51.9		5068.0	TP	+581	-3194	104,465	2,349,885

y = 104,465 x = 2,349,885  
 T - Int = R  
 MARKED - +31  
 COLL. x = +26

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-12-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S. W	LINE NO.	7	PAGE	12
AREA	UTAH	TOPO MAP	THE FLAT TOPS - 15'	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	
											PARTY MANAGER	W. Cassidy	

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
										5068.0				
	831		177° 48' 38"	+12.4'	+13.1	-		+13.1	5081.1		BS	+818	+147	TRaverse to
	831				+8.9	BH	+4.2	+13.1			BS			TRI-stn.
π	0				5.1	-		-5.1		5076.0	π	0	0	105.283 2,350.032
TP	1649		9° 28' 47"		10.5	90° 10'	-4.8	-15.3			TP	+1530	+615	106.813 2,350.647
TP	1649				10.2	269° 50'	-4.8	-15.0	+5.1	5066.0	TP			
	2691		209° 46' 20"	~	10.4	89° 16'	-39.1	-28.7		5037.3	BS	+1994	+1806	
	2691				10.3	270° 50'	-39.1	-28.8			BS			
π	0				5.1	-		-5.1		5032.2	π	0	0	108.807 2,352.453
TP	4137		35° 52' 10"	+12.4'	13.8	-		-13.8			TP	+2754	+3087	111.561 2,355.540
TP	4137				13.3	270° -		-13.3	-13.5	5023.8	TP			
	2090		134° 32' 34"	~	7.0	TH	-10.5	-3.5			BS	+1752	-1140	
	2090				6.7	TH 270°	-10.5	-3.8	+3.6	5020.2	BS			
π	0				5.1	-		-5.1		5015.1	π	0	0	113.313 2,354.400
Δ	1416		5° 45' 30"	~	5.1	90° 30'	-12.4	-17.5		5002.7	Punk	+1345	+441	114.658 2,354.841
Punk 1960	1416										TRI-stn			114.658 x 2,354.858 Punk 1960 Δ EL. 5004.1 -1.3 Elev.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-15-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S	LINE NO.	7	PAGE	13
AREA	UTAH	TOPO MAP	THE FLAT TOPS - 15	STATE	UTAH	COUNTY	EMERY	RANGE		PPM		PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
BS on Inter. TP		EW. 508.0	88° 04' 15"	+12.5	14.9	90° 54'	+16.2	+31.1	5099.1	5068.0	F			Σ = 104,465.0 - 2,349,885 TP-INTER. EL. 5068.0
1033			88° 04' 15"	+12.5	14.9	90° 54'	+16.2	+31.1	5099.1		BS	+189	-1015	
1033					14.8	268° 06'	+16.2	+31.0			BS		+2	
161	987		88° -	--	12.5	90° 54'	-15.5	-28.0		5071.1		-180	+970	104,474 2,349,812
162	658		-	-	6.0	90° 54'	-10.3	-16.3		5082.8		-120	+647	104,534 2,349,519
163	329		-	-	3.8	90° 40'	-3.8	-7.6		5091.5		-60	+323	104,594 2,349,195
164	0				5.1	-		-5.1		5094.0	T	0	0	104,654 2,348,872
165	329		268° 05'	+12.5	5.4	-		-5.4		5093.7		+60	-323	104,714 2,348,549
166	659		-	-	2.8	711°	+3.3	+0.5		5099.6		+121	-648	104,775 2,348,224
167	989		-	-	5.5	89° 10'	+14.4	+8.9		5108.0		+182	-972	104,836 2,347,900
168	1318		268° 05'	-	4.1	89° 08'	+19.9	+15.8		5114.9		+242	-1296	104,896 2,347,576
169	1648		-	+12.5	5.6	89° 04'	+26.8	+21.2		5120.3		+303	-1620	104,957 2,347,252
170	1977		-	-	5.6	89° 06'	+31.1	+25.5		5124.6		+363	-1943	105,017 2,346,929
171	2307		-	-	4.9	89° 06'	+36.2	+31.3		5130.4		+424	-2268	105,078 2,346,604
172	2636		268° 00' 36"	-	10.6	89° -	+46.0	+35.4		5134.5	TP	+481	-2591	105,135 2,346,283
172	2636				10.5	271° -	+46.0	+35.5			TP		+2	
2294	2285.3		87° 51' 47"	-	11.2	85° -	-199.9	-188.7	4945.8		BS	+411	-2248	
2294					11.1	275° -	-199.9	-188.8			BS		+2	
173	1968	1961.8	88° 05'	+12.5	4.3	86° 44'	+112.1	+107.8		5053.6		-361	+1931	105,185 2,345,968
174	1645		88° 10'	-	4.4	88° 08'	+53.6	+49.2		4995.0		-304	+1617	105,242 2,345,654
175	1316		-	-	4.3	88° 26'	+36.0	+31.7		4977.5		-244	+1293	105,302 2,345,330

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-15-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S.	LINE NO.	7	PAGE	14	
AREA	UTAH	TOPO MAP	THE FLAT TOPS - 15	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									4945.8					
176	987		88° 10'	+12.5°	5.4	88° 34'	+24.7	+19.3		4905.1		-183	+970	105363 2345.007
177	658		88° 30'	~	4.6	87° -	+11.5	+6.9		4952.7		-126	+646	105420 2344.683
178	329		88° 02'	~	3.0	89° -	+5.7	+2.7		4948.5		-60	+323	105486 2344.360
179	0				5.1	-		-5.1		4940.7	TP	0	0	105546 2344.037
180	329		268 02	~	4.0	93° 50'	+22.0	-26.0		4919.8		+60	-323	105606 2343.714
181	658		- -	~	3.0	92° 50'	-32.5	-35.5		4910.3		+120	-647	105666 2343.390
182	988		- -	-	5.0	92° 10'	-37.4	-42.4		4903.4		+181	-971	105727 2343.066
183	1316		- -	-	2.7	91° 50'	-42.1	-44.8		4901.0		+241	-1294	105787 2342.743
184	1645		268 02	+12.5	3.2	91° 34'	-45.0	-48.2		4897.6		+301	-1617	105847 2342.420
185	1974		- -	~	5.7	91° 30'	-51.7	-57.4		4888.4		+361	-1941	105907 2342.096
186	2304		- -	~	4.3	91° 30'	-60.3	-64.6		4881.2		+421	-2265	105967 2341.772
187	2633		- -	~	5.4	91° 26'	-65.9	-71.3		4874.5		+481	-2589	106027 2341.448
188	2963		- -	~	4.3	91° 26'	-74.1	-78.4		4867.4		+542	-2913	106088 2341.124
189	3291		- -	~	4.8	91° 16'	-72.7	-77.5		4868.3		+602	-3236	106148 2340.801
190	3620	3619.3	268 07 06	+12.5	3.6	91° 10'	-73.7	-77.3		4868.5	TP	+667	-3557	106213 2340.482
190	3620				3.5	268 50	-73.7	-77.2			TP		+2	
	1646		88 00 06	~	10.4	89° 30'	-14.4	-4.0	4864.5		BS	+300	-1618	106513
	1646			~	10.3	270 30	-14.4	-4.1			BS		+2	
191	1316		88° 07'	~	3.0	-		-3.0		4861.5		-242	+1293	106271 2340.159
192	988		- -	~	5.5	BH	+1.9	+10.4		4874.9		-182	+971	106331 2339.837

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-15-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		15			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		THE FLAT TOPS - 15'		UTAH		Emery								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4864.5						
193	658		88° -	+12.5	6.2	90° 30'	-5.7	-11.9		4852.6		-120	+647	106393	2,339,513
194	329		- -	-	5.1	91° 30'	-8.6	-13.7		4850.8		-60	+323	106453	2,339,189
195	0				5.1	-	-	-5.1		4859.4	TP	0	0	106,513	2,338,866
196	329		268° 08'	-	6.6	91° 30'	-8.6	-15.2		4849.3		+61	-323	106574	2,338,543
197	659		- -	-	5.7	90° -	-	-5.7		4858.8		+122	-648	106635	2,338,218
198	988		268° 40'	-	4.8	89° 50'	+2.9	-1.9		4862.6		+191	-969	106704	2,337,897
199	1317		268° 08'	+12.5	6.8	89° 40'	+7.7	+0.9		4865.4		+243	-1294	106756	2,337,512
200	1646		267° 38'	-	8.2	89° 50'	+4.8	-3.4		4861.1		+290	-1620	106803	2,337,246
201	1975		268° -	-	4.7	89° 30'	+17.2	+12.5		4877.0		+360	-1942	106873	2,336,924
202	2305		- -	-	5.2	89° 26'	+22.8	+17.6		4882.1		+420	-2266	106933	2,336,600
203	2634		268° 18'	+12.5	7.7	89° 20'	+30.6	+23.4		4887.9		+494	-2587	107007	2,336,279
204	2965		268° 08'	-	11.0	89° 26'	+29.3	+18.3		4882.8		+547	-2914	107060	2,335,952
205	3298		268° 11' 21"	-	3.5	89° 20'	+38.4	+34.9		4899.4	TP	+612	-3241	107,125	2,335,627
205	3298				3.4	270° 40'	+38.4	+35.0			TP				
	1111	1110.3	88° 01' 26"	+12.5	3.4	90°	+38.8	+42.2	4941.6		BS	+203	-1092	107327	
	1111				3.4	268° -	+38.8	+42.2			BS	-1			
206	781		88° 08'	-	10.1	92° -	-27.3	-37.4		4904.2		-144	+768	107183	2,335,305
207	452		87° 40'	-	10.2	91° 28'	-11.6	-21.8		4919.8		-80	+445	107247	2,334,982
#	602		89° 08' 46"	-	10.5	92° -	-21.0	-31.5		4910.1	TP	-121	+589	107,206	2,335,126
208	122		87° 40'	-	10.8	91° 30'	-3.2	-14.0		4927.6		-22	+120	107305	2,334,657

2040 3-107,225 N-2,335,160 Section 12

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-15-85		B. Cotcamp		B. SALDIVAR		6834		B.S. <i>lc</i>		7		16			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		THE FLAT TOPS -15'		UTAH		EMERY								W. CASSIDY	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4941.6						
π	0				5.1	-		-5.1		4936.5	π	0	0	107,327	2,334,537
209	207		268° 07'	+12.5	5.2	91° -	-3.6	-8.8		4932.8		+38	-203	107,365	2,334,334
216	537		- -	-	8.2	90° 30'	-4.7	-12.9		4928.7		+99	-528	107,426	2,334,009
211	867		- -	-	6.2	90° 20'	-5.0	-11.2		4930.4		+160	-852	107,489	2,333,685
212	1196		268° 08' 52"	-	5.6	90° 20'	-7.0	-12.6		4929.0	TP	+221	-1175	107,547	2,333,364
212	1196			-	5.5	269° 40'	-7.0	-12.5			TP	-1	+2		
	1374	1372.9	88° 08' 27"	+12.5	4.9	87° 40'	-55.9	-51.0	4878.0		BS	+254	-1349		
	1374				4.8	272° 26'	-55.9	-51.1			BS	-1	+2		
213	1045		88° 07'	-	4.2	87° 46'	+40.7	+36.5		4914.5		-193	+1027	107,607	2,333,044
214	716		- -	-	4.7	88° 30'	+18.7	+14.0		4892.0		-132	+704	107,668	2,332,721
215	587		- -	-	8.7	89° -	+6.8	-1.9		4876.1		-71	+380	107,729	2,332,397
216	58		- -	-	4.4	89° -	+1.0	-3.4		4874.6		-11	+57	107,789	2,332,074
π	0				5.1	-		-5.1		4872.9	π	0	0	107,800	2,332,017
217	272		269° 10'	+12.5	4.6	94° 3'	-21.3	-25.9		4852.1		+55	-266	107,855	2,331,751
218	601		268° 20'	-	7.9	94° 30'	-47.2	-55.1		4822.9		+113	-590	107,913	2,331,427
219	931		268° 08'	-	6.1	94° -	-64.9	-71.0		4807.0		+172	-915	107,972	2,331,102
220	1260		- -	-	7.4	93° 20'	-13.2	-80.7		4797.3		+233	-1238	108,033	2,330,779
221	1590		- -	-	9.2	93° -	-83.2	-92.4		4785.6		+293	-1563	108,093	2,330,454
222	1919		- -	-	8.0	92° 50'	-94.9	-102.9		4775.1		+354	-1886	108,154	2,330,131

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-15-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		17			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		THE FLAT TOPS - 15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4878.0						
223	2247	2244.6	268° 14' 20"	+12.5	6.2	92° 40'	-104.5	-110.7	}	4767.3	TP	+418	-2205	108,217	2,329,814
223	2247				6.1	267° 20'	-104.5	-110.6		TP			-	+2	
	1648		87° 55' 42"	-	+13.1	88° 40'	-38.3	-25.2	}	4742.1	BS	+298	-1620		
	1648				+13.0	271° 20'	-38.3	-25.3		BS			-	+2	
224	1318		88° 06'	-	6.2	89° -	+23.0	+16.8		4758.9		-242	+1296	108272	2,329,492
225	989		- -	-	5.1	89° -	+17.3	+12.2		4754.3		-182	+972	108332	2,329,168
226	659		- -	-	6.2	88° 50'	+13.4	+7.2		4749.3		-121	+648	108393	2,328,844
227	330		- -	-	6.3	88° 50'	+6.7	+0.4		4742.3		-61	+324	108453	2,328,520
228	0				5.1	-		-5.1		4737.0	π	0	0	108,514	2,328,196
11	19		249° 38' 40"	+12.5	5.6	90° 50'	-0.3	-5.9		4736.2		-3	-19	108511	2,328,177
229	329		268° 09'	-	5.3	91° 10'	-6.7	-12.0		4730.1		+61	-323	108575	2,327,873
230	658		- -	-	5.3	91° 16'	-14.5	-19.8		4722.3		+122	-647	108636	2,327,549
231	988		- -	-	4.2	91° 14'	-21.3	-25.5		4716.6		+183	-971	108697	2,327,225
232	1315		268° 09'	-	3.5	90° 40'	-15.3	-18.8		4723.3		+243	-1292	108757	2,326,904
TP	1401		268° 06' 06"	-	5.7	90° 20'	-8.2	-13.9	}	4728.2	TP	+258	-1377	108,771	2,326,820
TP	1401				5.6	269° 40'	-8.2	-13.8		TP			-	+1	
	2220		88° 17' 39"	+12.5	9.6	BH	+11.1	+20.7	}	4748.9	BS	+416	-2181		
	2220				+9.5	BH 270	+11.1	+20.6		BS			-	+1	
233	1976		88° 10'	-	4.2	96° 50'	-28.7	-32.9		4716.0		-366	+1942	108820	2,326,582
234	1647		-	-	5.0	91° -	-28.7	-33.7		4715.2		-305	+1619	108881	2,326,259

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-15-85		B. Cotamp		B. SALDIVAR		6834		B.S.		7		18			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		THE FLAT TOPS-		UTAM		EMERY								W. PASSIDY	
STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4748.9						
235	1317		88° 12'	+12.5	4.5	91° 20'	-30.6	-35.1		4713.8		-245	+1294	108941	2,325,934
236	988		-	-	3.7	91° 20'	-23.0	-26.7		4722.2		-183	+971	109003	2,325,611
237	1018		88° 24' 34"	-	4.6	91° 20'	-23.7	-28.3		4720.6		-193	+979	108943	2,325,639
237	659		88° 12'	-	5.5	91° 36'	-18.4	-23.9		4725.0		-122	+648	109064	2,325,288
238	330		-	-	5.4	91° 10'	-6.7	-12.1		4736.8		-61	+324	109125	2,324,964
239	0				5.1	-		-5.1		4743.8	κ	0	0	109186	2,324,640
240	330		268° 09'	+12.5	4.3	91° 10'	-6.7	-11.0		4737.9		+61	-324	109249	2,324,316
241	659		-	-	14.7	90° 30'	-5.8	-20.5		4728.4		+122	-648	109308	2,323,992
242	988		-	-	19.3	90° 36'	-10.3	-29.6		4719.3		+183	-971	109369	2,323,669
243	1317		-	-	14.9	90° 36'	-13.8	-28.7		4720.2		+243	-1294	109429	2,323,346
244	1646		268° 10'	-	11.3	90° 40'	-19.2	-30.5		4718.4		+305	-1618	109491	2,323,022
245	1976		-	+12.5	6.1	90° 30'	-17.2	-23.3		4725.6		+366	-1942	109552	2,322,698
246	2365		-	-	9.5	90° 30'	-20.1	-29.6		4719.3		+427	-2265	109613	2,322,375
247	2635		-	-	4.7	90° 30'	-23.0	-27.7		4721.2		+488	-2589	109674	2,322,051
Section marker	2788		267° 54' 52"	-	0.9	90° 30'	-24.3	-25.2		4723.7	$\frac{16}{21}$	+504	-2741	109690	2,321,908
248	2965		268° 12' 24"	+12.3	12.0	90° 10'	-8.6	-20.6		4728.4	$\frac{16}{21}$	+541	-2915	109727	2,321,725
248	2965				11.7	269° 50'	-8.6	-20.3	-20.5	4728.4	$\frac{16}{21}$				
	1317	1315.6	87° 56' 57"	-	9.8	92° 20'	+53.6	+63.4	4791.8		BS	+234	-1295	109961	
	1317				9.7	267° 46'	+53.6	+63.3			BS				
249	988		88° 02'	-	10.1	92° 20'	-40.2	-50.3		4741.5		-177	+972	109784	2,321,402

244 > -107,690 x -2,321,900  
 2 Section + 18 Horiz - 1  
 CORR. X = 25

SURVEY NOTES-HIGH RESOLUTION DATA  
GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-15-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		19			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		THE FLAT TOPS - 15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									47918						
250	659		88° 10'	-12.3	10.8	92° 20'	-26.8	-37.6		4754.2		-120	+648	109841	2,321,078
251	330		-	--	6.4	92° 20'	-13.4	-19.8		4772.0		-60	+325	109901	2,320,755
252	0				5.1	-		-5.1		4786.7	TP	0	0	109961	2,320,430
253	330		268° 27'	-	6.6	-		-6.6		4785.2		+62	-324	110023	2,320,106
254	660		-	-	7.1	89° 20'	+7.7	+0.6		4792.4		+123	-648	110084	2,319,782
255	990		268° 18'	-	13.8	88° 38'	+23.6	+9.8		4801.6		+182	-973	110143	2,319,457
256	1320		268° 22'	-	11.3	88° 40'	+30.7	+19.4		4811.2		+244	-1297	110205	2,319,133
257	1648		-	+12.3	9.8	88° 40'	+38.3	+28.5		4820.3		+305	-1620	110266	2,318,810
258	1976		-	-	8.8	88° 40'	+46.0	+37.2		4829.0		+366	-1942	110327	2,318,488
259	2303		268° 17'	-	7.9	88° 40'	+53.6	+45.7		4837.5		+423	-2264	110384	2,318,166
260	2636	2635.2	268° 20' 41"	--	13.7	88° 36'	+65.9	+52.2			TP	+487	-2590	110448	2,317,840
260	2636				13.4	271° 26'	+65.9	+52.5	+52.3	4844.1	TP				
	1647		88° 13' 04"	+12.3	+13.7	BH	+8.2	+21.9	4866.0		BS	+301	-1619		
	1647				+13.6	BH 271°	+8.2	+21.8			BS				
261	1318		88° 16'	-	10.0	90° 30'	-11.5	-21.5		4844.5		-242	+1296	110507	2,317,517
262	989		-	-	8.9	90° 30'	-8.6	-17.5		4848.5		-181	+972	110568	2,317,193
263	659		-	-	7.2	90° 30'	-5.8	-13.0		4853.0		-121	+648	110628	2,316,869
264	330		-	-	8.1	90° 30'	-2.9	-11.0		4855.0		-61	+324	110688	2,316,545
265	0				5.1	-		-5.1		4860.9	TP	0	0	110749	2,316,221

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-15-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		20			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		THE FLAT TOPS - 15		UTAH		Emery								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4866.0						
266	330		268° 14'	+12.3	4.7	90° 30'	-2.9	-7.6		4858.4		+60	-324	110809	2315.899
267	659		-	-	6.9	90° 30'	-5.8	-12.7		4853.3		+120	-648	110869	2315.573
268	988		-	-	10.6	-	-	-10.6		4855.4		+181	-971	110930	2315.250
269	1318		-	-	11.5	-	-	-11.5		4854.5		+241	-1296	110990	2314.925
270	1647		268° 14'	-	12.7	-	-	-12.7		4853.3		+301	-1619	111050	2314.602
271	1976		-	-	4.6	-	-	-4.6		4861.4		+361	-1943	111110	2314.278
272	2305		268° 24' 40"	-	5.2	89° 40'	+13.4	+8.2		4874.2	TP	+428	-2265	111177	2313.956
272	2305				5.1	270° 20'	+13.4	+8.3			TP				
	3049		88° 13' 28"	+12.4	12.5	TH	-15.2	-2.7			BS	+562	-2997		
	3049				12.2	TH 270°	-15.2	-3.0	288	4871.4	BS				
273	2720		88° 17'	-	7.5	90° 08'	-6.3	-13.8		4857.6		-504	+2673	111235	2313.632
274	2391		-	-	10.6	90° 14'	-9.7	-20.3		4851.1		-443	+2350	111296	2313.309
275	2062		-	-	8.9	90° 10'	-6.0	-14.9		4856.5		-382	+2026	111357	2312.985
276	1732		-	-	6.2	90° 10'	-5.0	-11.2		4860.2		-321	+1702	111418	2312.661
277	1403		88° 17'	+12.4	6.6	90° 10'	-4.1	-10.7		4860.7		-260	+1379	111479	2312.338
278	1073		-	-	7.6	90° 10'	-3.1	-10.7		4860.7		-199	+1054	111540	2312.013
279	744		-	-	6.4	-	-	-6.4		4865.0		-138	+731	111601	2311.690
280	414		-	-	6.7	-	-	-6.7		4864.7		-77	+407	111662	2311.366
281	85		-	-	8.7	-	-	-8.7		4862.7		-16	+84	111723	2311.043
Σ	0				5.1	-	-	-5.1		4866.3	Σ	0	0	111739	2310.959

111,175 x - 2,313,980 section line Inter.

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-15-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S.	LINE NO.	7	PAGE	21	
AREA	UTAH	TOPO MAP	THE FLAT TOPS-15	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS
												LAT.	DEP.	Y	X			
									4871.4									
282	245		268° 20'	+12.4	6.6	91° -	-4.3	-10.9		4860.5		+46	-241	111785	2310.718			
283	575		- -	- -	11.4	91° -	-10.0	-21.4		4850.0		+107	-565	111846	2310.394			
284	904		- -	- -	5.8	91° -	-15.8	-21.6		4849.8		+168	-888	111907	2310.071			
285	1234		- -	- -	10.2	90° 50'	-17.9	-28.1		4843.3		+230	-1212	111969	2309.747			
286	1563		268° 20'	+12.4	9.8	91° -	-27.3	-37.1		4834.3		+291	-1536	112030	2309.423			
287	1892		- -	-	11.0	91° -	-33.0	-44.0		4827.4		+352	-1859	112091	2309.100			
288	2222		- -	-	11.2	91° 02'	-40.1	-59.3		4812.1		+414	-2183	112153	2308.776			
TP	2400		268° 12' 33"	~	12.7	90° 50'	-34.9	-47.6			TP	+442	-2359	112181	2308.600			
TP	2400				12.4	269° 10'	-34.9	-47.3	47.8	4823.9	TP							
	3114		88° 28' 52"	+12.4	3.1	89° -	-54.3	-51.2			BS	+588	-3058					
	3114				2.8	271° -	-54.3	-51.5	51.3	4772.6	BS							
289	2965		88° 18'	~	4.8	89° 10'	+43.1	+38.3		4810.9		-551	+2913	112218	2308.455			
290	2635		- -	~	7.1	89° 20'	+30.7	+23.6		4796.2		-489	+2589	112280	2308.131			
291	2306		- -	-	12.5	89° 20'	+26.8	+14.3		4786.9		-428	+2266	112341	2307.808			
292	1976		- -	-	7.9	89° 30'	+17.2	+9.3		4781.9		-367	+1942	112402	2307.484			
293	1647		88° 19'	+12.4	8.1	89° 50'	+4.8	-3.3		4769.3		-306	+1618	112463	2307.160			
294	1317		- -	~	8.8	89° 50'	+3.8	-5.0		4767.6		-245	+1294	112524	2306.836			
295	988		- -	~	8.9	89° 50'	+2.9	-6.0		4766.6		-184	+971	112585	2306.513			
296	659		- -	-	10.1	89° 50'	+1.9	-8.2		4764.4		-123	+648	112646	2306.190			
297	330		- -	-	9.1	89° 50'	+1.0	-8.1		4764.5		-61	+324	112708	2305.866			

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-15-85		B. Coteamp		B. SALDIVAR		6834		B.S.		7		22			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		THE FLAT TOPS-15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4772.6						
298	0				5.1	-		-5.1		4767.5	T	0	0	112,769	2,305,542
299	330		268° 24'	+124	6.3	89° 30'	+2.9	-3.4		4769.2		+62	-324	112831	2,305,218
300	660		- -	-	4.7	89° 30'	+5.8	+1.1		4773.7		+124	-648	112893	2,304,894
301	990		- -	-	4.1	89° 30'	+8.6	+4.5		4777.1		+186	-972	112955	2,304,570
302	1320		- -	-	7.0	89° 20'	+15.4	+8.4		4781.0		+247	-1297	113016	2,304,245
303	1649		268° 24'	+124	6.4	89° 20'	+19.2	+12.8		4785.4		+309	-1620	113078	2,303,922
304	1979		- -	-	4.7	89° 20'	+23.0	+18.3		4790.9		+371	-1944	113140	2,303,598
305	2309		- -	-	8.8	89° 10'	+33.6	+24.8		4797.4		+433	-2268	113202	2,303,274
306	2638		- -	-	7.9	89° 10'	+38.4	+30.5		4803.1		+494	-2591	113263	2,302,951
307	2968		- -	-	5.3	89° 10'	+43.2	+37.9		4810.5		+556	-2915	113325	2,302,627
308	3298		268° 24'	+124	6.2	89° -	+57.6	+51.4		4824.0		+618	-3240	113387	2,302,302
309	3627		- -	-	6.3	88° 50'	+73.8	+67.5		4840.1		+680	-3563	113449	2,301,979
310	3957		- -	-	6.7	88° 46'	+85.2	+79.0		4851.6		+741	-3887	113510	2,301,655
311	4286	4284.7	268° 23' 29"	-	13.6	88° 34'	+107.2	+93.6			TP	+802	-4209	113571	2,301,333
311	4286				13.3	271° 26'	+107.2	+93.9	+93.78	4866.3	TP				
	1648		88° 20' 32"	+124	11.9	90° 40'	+19.2	+31.1	4897.4		BS	+307	-1619		
	1648				11.8	269° 20'	+19.2	+31.0			BS				
312	1320		88° 21'	-	13.3	91° -	-23.0	-36.3		4861.1		-246	+1297	113632	2,301,011
313	990		- -	-	6.0	91° -	-17.3	-23.3		4874.1		-185	+973	113693	2,300,687
314	660		- -	-	5.1	91° -	-11.5	-16.6		4880.8		-123	+648	113755	2,300,362



SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE				
10-16-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		24				
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER		
UTAH		THE FLAT TOPS-15		UTAH		EMERY								W. Cassidy		
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS		
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y	X
										4889.3				114,126	2,298,417	
	1505		88° 34' 53"	+124 +	13.0	90° 30'	+13.1	+26.1	4915.4		BS	+287	-1477			
	1505				12.9	269° 30'	+13.1	+26.0		BS						
321	1177		88° 28'	-	6.8	91° -	-20.5	-27.3		4888.1		-222	+1156	114191	2,298,096	
322	847		- -	-	10.9	91° -	-14.8	-25.7		4889.7		-160	+832	114253	2,297,772	
323	518		- -	-	7.3	91° -	-9.0	-16.3		4899.1		-98	+509	114315	2,297,449	
324	188		- -	-	7.3	-	-	-7.3		4908.1		-35	+185	114378	2,297,125	
π	0				5.1	-	-	-5.1		4910.3	π	0	0	114,413	2,296,940	
325	142		268° 31'	+124	5.3	93° 30'	-8.7	-14.0		4901.4		+27	-139	114440	2,296,801	
326	471		- -	-	10.2	93° 20'	-27.4	-37.6		4877.8		+89	-462	114502	2,296,478	
327	801		- -	-	6.5	93° -	-41.9	-48.4		4867.0		+152	-787	114565	2,296,153	
328	1130		268° 31'	-	9.9	93° -	-59.1	-69.0		4846.4		+214	-1110	114627	2,295,830	
329	1460		- -	+124	4.4	93° -	-76.4	-80.8		4834.6		+277	-1434	114690	2,295,506	
330	1789		- -	-	8.7	92° 40'	-83.2	-91.9		4823.5		+339	-1757	114752	2,295,183	
331	2118		- -	-	5.8	92° 20'	-86.2	-92.0		4823.4		+401	-2080	114814	2,294,860	
332	2448		- -	-	4.2	92° -	-85.4	-89.6		4825.8		+464	-2404	114877	2,294,536	
333	2777		268° 31'	+124	7.7	91° 50'	-88.8	-96.5		4818.9		+526	-2727	114939	2,294,213	
334	3106		- -	-	5.3	91° 30'	-81.3	-86.6		4828.8		+588	-3050	115001	2,293,890	
335	3435		- -	-	10.2	91° 10'	-69.9	-80.1		4835.3		+651	-3373	115064	2,293,567	
336	3765		- -	-	6.9	91° 16'	-83.2	-90.1		4825.3		+713	-3697	115126	2,293,243	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.	PAGE						
10-16-85		B. Cotcamp		B. SALDIVAR		6834		B. S.		7	25						
AREA		TOPO MAP		STATE	COUNTY	TWP	RANGE	PPM	PARTY MANAGER								
UTAM		THE FLAT TOPS - 15		UTAH	EMERY				W. Cassidy								
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH +	EAST +	COORDINATES		REMARKS	
												SOUTH -	WEST -	Y	X		
									4915.4								
337	4093	4092.3	268° 36' 34"	+12.4	9.3	91° 04'	-76.2	-85.5		4829.9	TP	+775	-4018	115.188	2,292.922		
337	4093				9.2	268° 56'	-76.2	-85.4			TP						
	1279		27° 44' 06"	-	7.8	91° -	+22.3	+30.1	4860.0		BS	-978	-824			43' 30"	
	1279				7.7	269° -	+22.3	+30.0			BS						
338	988		25° 40'	-	12.4	91° -	-17.2	-29.6		4830.4		+778	+609	114988	2,292.707	on percent road	
339	659		- -	-	5.3	91° -	-11.5	-16.8		4843.2		+519	+406	114729	2,292.504		
340	330		24° 40'	-	9.2	-		-9.2		4850.8		+263	+199	114473	2,292.297		
341	0				5.1	-		-5.1		4854.9	X	0	0	114.210	2,292.098		
342	330		201° 20'	+12.4	7.2	89° -	+5.8	-1.4		4858.6		-274	-183	113936	2,291.915		
343	652		206° 30'	-	7.3	89° 20'	+7.6	+0.3		4860.3		-507	-409	113703	2,291.689		
344	965		214° 05'	-	6.0	89° 20'	+11.2	+5.2		4865.2		-664	-700	113546	2,291.398		
345	1287		217° 25'	-	6.6	89° 10'	+18.7	+12.1		4872.1		-830	-983	113380	2,291.115		
346	1610		220° -	-	8.0	89° 10'	+23.4	+15.4		4875.4		-982	-1276	113228	2,290.822		
347	1931		222° 12' 14"	-	7.6	89° 10'	+28.1	+20.5			TP	-1118	-1574	113.092	2,290.524		
347	1931				7.3	270° 50'	+28.1	+20.8	+20.3	4880.6	TP						
	1475		62° 03' 32"	+12.4	7.6	TH	-7.4	+0.2	4880.8		BS	-395	-1421				
	1475				7.5	TH 270°	-7.4	+0.1			BS						
348	1149		63° 03'	-	4.7	-		-4.7		4876.1		+289	+1112	112986	2,290.215		
349	820		- -	-	9.5	BM	-4.1	-13.6		4867.2		+266	+794	112903	2,289.897		
356	490		- -	-	7.5	91° -	-8.6	-16.1		4864.7		+123	+474	112820	2,289.577		

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-16-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S.	LINE NO.	7	PAGE	26	
AREA	UTAH	TOPO MAP	THE FLAT TOPS - 15'	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									4880.8							
351	161		63° 03'	+12.4	9.7	91° -	-2.8	-12.5		4868.3		+40	+156	112737	2289.259	
	0				5.1	-		-5.1		4875.7	X	0	0	112.697	2.289.103	
352	169		243° 16'	-	7.1	91° -	-2.9	-10.0		4870.8		-42	-164	112655	2288.939	
353	498		-	-	5.8	91° -	-8.7	-14.5		4866.3		-123	-483	112574	2288.620	
354	828		-	-	7.6	90° 20'	-4.8	-12.4		4868.4		-205	-802	112492	2288.301	
355	1158		-	-	6.3	90° 20'	-6.7	-13.0		4867.8		-287	-1122	112410	2287.981	
356	1488		243° 16'	+12.4	12.0	-		-12.0		4868.6		-368	-1442	112329	2287.661	
357	1818		-	-	9.3	-		-9.3		4871.5		-450	-1761	112247	2287.342	
358	2148		-	-	4.4	-		-4.4		4876.4		-532	-2081	112165	2287.022	
359	2477		243° 13' 39"	-	5.7	-		-5.7		4875.1	TP	-615	-2399	112.082	2286.704	
359	2477				5.6	270° -		-5.6			TP					
	3623		63° 04' 02"	+12.4	11.2	-		+11.2			BS	-909	-3507			
	3623				10.9	270° -		+10.9	+11.3	4886.2	BS					
360	3294		63° 04'	-	10.6	90° 06'	-5.7	-16.3		4869.9		+827	+3189	112000	2286.386	
361	2964		-	-	6.8	90° 04'	-3.4	-10.2		4876.0		+744	+2869	111917	2286.066	
362	2635		63° -	-	5.4	-		-5.4		4880.8		+664	+2550	111837	2285.717	THE FLAT TOPS - 15'
363	2306		-	-	9.2	-		-9.2		4877.0		+581	+2232	111754	2285.429	TEMPLE Mtn - 15'
364	1977		-	-	7.5	-		-7.5		4878.7		+498	+1913	111671	2285.110	
365	1647		-	-	7.0	-		-7.0		4879.2		+415	+1594	111588	2284.791	
366	1318		62° 05'	-	9.1	-		-9.1		4877.1		+353	+1270	111526	2284.467	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-16-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		27			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Temple Mtn - 15		UTAH		Emery								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									4886.2						
367	990		62° 40'	+12.4	7.8	-		-7.8		4878.4		+255	+957	111,428	2,284,157
368	660		--	~	7.7	-		-7.7		4878.5		+170	+638	111,343	2,283,835
369	330		--	~	7.0	-		-7.0		4879.2		+85	+319	111,258	2,283,516
370	0				5.1	-		-5.1		4881.1	TP	0	0	111,173	2,283,197
371	330		243 10	+12.4	4.7	89° 30'	+2.9	-1.8		4884.4		-82	-320	111,091	2,282,877
372	660		--	~	6.4	89° 30'	+5.8	-0.6		4885.6		-165	-639	111,008	2,282,558
373	990		--	~	11.3	89° 30'	+8.6	-2.7		4883.5		-247	-959	110,926	2,282,238
374	1320		--	~	11.3	89° 30'	+3.8	-7.5		4878.7		-329	-1278	110,844	2,281,919
375	1650		243 10	~	12.0	89° 54'	+2.9	-9.1		4877.1		-411	-1598	110,762	2,281,599
376	1980		--	+12.4	9.7	89° 54'	+3.5	-6.2		4880.0		-494	-1918	110,679	2,281,279
377	2310		--	~	12.1	89° 52'	+5.4	-6.7		4879.5		-576	-2237	110,597	2,280,960
378	2639		--	~	11.7	89° 52'	+6.1	-5.6		4880.6		-658	-2556	110,515	2,280,641
379 TP	2879		243 13 05	~	12.6	89° 40'	+16.7	+4.1			TP	-715	-2789	110,458	2,280,408
379 TP	2879				12.3	270° 20'	+16.7	+4.4	+4.23	4890.4	TP				
	2063		63 06 57	+12.4	+11.8	90° 30'	+18.0	+29.8			BS	-516	-1997		
	2063				+11.5	269° 30'	+18.0	+29.5	+29.75	4920.1	BS				
379	1977		63 10	~	8.7	90° 40'	-23.0	-31.7		4888.4		+493	+1915	110,435	2,280,326
380	1650		--	~	4.7	90° 40'	-19.2	-23.9		4896.2		+411	+1598	110,353	2,280,009
381	1320		--	~	7.9	90° 30'	-11.5	-19.4		4900.7		+329	+1278	110,271	2,279,689
382	990		--	~	10.0	90° 30'	-8.6	-18.6		4901.5		+247	+959	110,189	2,279,370

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-16-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S. <i>W</i>	LINE NO.	7	PAGE	28	
AREA	UTAH	TOPO MAP	Temple Mtn. -15'	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									4920.1										
383	660		63 10	+12.4	10.9	90 30	-5.8	-16.7		4903.4		+ 165	+639	110,167	2,279,050				
384	330		--	--	7.6	90 30	-2.9	-10.5		4909.6		+ 82	+320	110,624	2,278,731				
385	0				5.1	-		-5.1		4915.0	π	0	0	109,942	2,278,411				
386	330		243 -	--	7.5	88 30	+8.6	+1.1		4921.2		- 83	-319	109,859	2,278,092				
387	660		--	--	6.5	88 30	+17.3	+10.8		4930.9		- 166	-639	109,776	2,277,772				
388	990		--	--	4.2	88 30	+25.9	+21.7		4941.8		- 250	-958	109,692	2,277,453				
389	1320		243 -	--	4.1	88 30	+34.6	+30.5		4950.6		- 333	-1277	109,609	2,277,134				
390	1650		--	+12.4	5.8	88 30	+43.2	+37.4		4957.5		- 416	-1597	109,526	2,276,814				
391	1951		245 30	--	9.4	88 20	+56.7	+47.3		4967.4		- 409	-1908	109,533	2,276,503				
392	2126		253 25	--	8.0	88 20	+61.8	+53.8		4973.9		- 155	-2120	109,787	2,276,291				
393	2332		260 05	--	10.1	88 20	+67.8	+57.7		4977.8		+ 101	-2330	110,043	2,276,081				
394	2564		265 32	--	8.6	88 20	+74.6	+66.0		4986.1		+ 354	-2539	110,296	2,275,872				
395	2816		270 04	--	4.8	88 20	+81.9	+77.1		4997.2		+ 608	-2750	110,550	2,275,661				
396	3082	3080.4	273 52 33	--	14.9	88 10	+98.6	+83.7			TP	+863	-2957	110,805	2,275,454				
396	3082				14.6	271 50	+98.6	+84.0	+8383	5003.9	TP								
	1318		127 26 30	+12.4	11.6	-		+11.6	5015.5		BS	+1007	-850						
	1318				11.5	270 -		+11.5			BS								
397	990		127 43	--	10.2	-		-10.2		5005.3		- 760	+635	111,052	2,275,239				
398	660		--	--	5.6	-		-5.6		5009.9		- 506	+423	111,306	2,275,027				
399	330		--	--	6.5	-		-6.5		5009.0		- 253	+212	111,559	2,274,816				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-16-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S. <i>W</i>	LINE NO.	7	PAGE	29	
AREA	UTAH	TOPO MAP	Temple Mt. -15'	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									5015.5					
400	0				5.1	-		-5.1		5010.4	π	0	0	111.812 2274.604
401	330		308° 50'	+12.4	6.0	91° -	-5.8	-11.8		5003.7		+257	-207	112.069 2274.397
402	659		- -	-	11.7	91° -	-11.5	-23.2		4992.2		+514	-413	112.326 2274.191
403	989		- -	-	12.2	91° 20'	-23.0	-35.2		4980.3		+771	-619	112.583 2273.985
404	1318		308° 50'	+12.4	12.6	91° 26'	-33.0	-45.6		4969.9		+1028	-825	112.840 2273.779
405	1648		- -	-	12.7	91° 20'	-38.3	-51.0		4964.5		+1285	-1032	113.097 2273.572
406	1977		- -	-	17.8	91° 16'	-43.7	-61.5		4954.0		+1541	-1238	113.353 2273.366
407	2307		- -	-	11.0	91° 16'	-51.0	-62.0		4953.5		+1799	-1445	113.611 2273.159
408	2636		308° 56' 30"	-	4.9	91° 10'	-53.7	-58.6	-5853		TP	+2058	-1646	113.870 2272.958
408	2636				4.6	268° 50'	-53.7	-58.3			4957.0	TP		
	1734	1730.8	169° 48' 03"	+12.4	11.8	93° 30'	+105.9	+117.7			BS	+1729	+66	
	1734				11.7	266° 30'	+105.9	+117.6	5074.6		BS			
409	1503	1499.0	178° 08'	-	8.1	94° 10'	-109.2	-117.3		4957.3		-1474	-274	114.125 2272.750
410	1315	1310.6	189° 12'	-	10.9	94° 40'	-107.0	-117.9		4956.7		-1219	-482	114.380 2272.542
411	1330	1325.6	203° 18'	-	12.2	94° 46'	-108.2	-120.4		4954.2		-1077	-774	114.522 2272.250
412	1462	1457.2	215° 25'	+12.4	12.3	94° 40'	-118.9	-131.2		4943.4		-979	-1080	114.620 2271.944
413	1456	1450.5	228° 25'	-	8.0	95° -	-126.9	-134.9		4939.7		-707	-1266	114.892 2271.758
414	1479	1473.4	241° 19'	-	8.7	95° -	-128.9	-137.6		4937.0		-413	-1414	115.186 2271.610
415	1457	1451.1	254° 05'	-	9.2	95° 10'	-131.2	-140.4		4934.2		-89	-1448	115.510 2271.576
416	1620	1613.4	264° 23'	-	5.9	95° 10'	-145.9	-151.8		4922.8		+191	-1602	115.790 2271.422

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-16-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S.	LINE NO.	7	PAGE	30	
AREA	UTAH	TOPO MAP	Temple mtn - 15'	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM		
													PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									5074.6							
417	1865	1858.4	271° 40'		4.4	94° 50'	-157.1	-161.5		4913.1		+452	-1803	116,051	2,271,221	
418	2133	2127.4	277° 05'		6.7	94° 10'	-155.0	-161.7		4912.9		+710	-2006	116,309	2,271,018	
419	2420	2415.5	281° 08'		8.1	93° 30'	-147.7	-155.8		4918.8		+964	-2215	116,563	2,270,809	
420	2713	2708.9	284° 28'		4.9	93° 10'	-149.9	-154.8		4919.8		+1224	-2417	116,823	2,270,607	(SCALED) 8120' offset south
Highway #24	2983	2979.4	286° 12' 30"		6.2	92° 50'	-147.5	-153.7		4920.9		+1427	-2616	117,026	2,270,408	5-115,602 x 2,270,996 A offset u.s.g.s. 1952. Rev.
X	0				4.6	-		-4.6		5070.0	X	0	0	115,599	2,273,024	note - 8120' offset south between Sta. 420 - 421

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-22-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.C.W.	LINE NO.	7	PAGE	31a
AREA	UTAH	TOPO MAP	Temple mtn - 15'	STATE	UTAH	COUNTY	EMERY	RANGE		PPM		PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
K	U.S.G.S. TRI-STATION		Desert Elev.		5070.0					5070.0	Te.					Desert TRI-sta. EL. 5070.0
	3562				+6.2	87°50'	-134.7	-128.5	4941.4		BS					
	3562				+6.0	272°10'	-134.7	-128.7	4941.4		BS					
X	0				5.1	-		-5.1			X					
Δ	3534				5.8	89°40'	+20.6	+14.8			Δ					MAP. TRISTA. GARVIN EL. 4960
Δ	3534				5.7	270°20'	+20.6	+14.9		4956.3	Δ					U.S.G.S. SURVEYED EL. 4956.3

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-18-85	INSTRUMENT MAN	B. Cotamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	BS	LINE NO.	7	PAGE	31	
AREA	UTAM	TOPO MAP	Temple Mtn. -15'	STATE	UTAM	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTting DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
Tk.	u.s.g.s.	GARVIN -	78 STA. Elev.	4956.3	y-	111.738	x- 2268.275			4956.3	Tk.			311.738 x- 2268.275
	3373		40° 48' 10"	+12.7	+7.5	96° 30'	+29.4	+36.9			BS	-2006	-2711	U.S.G.S. GARVIN TRIA elev. MAP. Elev. 4961.0 - wrong SURVEYED ELEV 4956.3
	3373			+7.8		269° 30'	+29.4	+37.2	37.03	4973.3	BS	+2		
421	1316		76° 35'	-	9.8	90° 40'	-15.3	-25.1		4968.2		+16	+1316	109.750 2266.880
422	1362		77° 46' 30"	-	9.3	90° 40'	-15.8	-25.1		4968.2		-11	+1362	109.723 2266.926
422	988		77° 18'	-	9.3	90° 40'	-11.5	-20.8		4972.5		+0	+988	109.734 2266.552
423	660		77° 40'	-	9.4	90° 30'	-5.8	-15.2		4978.1		-4	+660	109.730 2266.224
424	330		-	-	5.7	90° 30'	-2.9	-8.6		4984.7		-2	+330	109.732 2265.894
425	0				5.1	-		-5.1		4988.2	Tk	0	0	109.734 2265.564
426	330		262 34	+12.7	4.7	89° 50'	+1.0	-3.7		4989.6		+30	-329	109.764 2265.235
427	660		-	-	4.7	89° 40'	+3.8	-0.9		4992.4		+61	-657	109.795 2264.907
428	990		-	-	6.2	89° 40'	+5.8	-0.4		4992.9		+91	-986	109.825 2264.578
429	1320		-	-	7.8	89° 40'	+7.7	-0.1		4993.2		+121	-1314	109.855 2264.250
430	1650		262 34	+12.7	8.3	89° 40'	+9.6	+1.3		4994.6		+151	-1643	109.885 2263.921
431	1980		-	-	9.0	89° 40'	+11.5	+2.5		4995.8		+182	-1972	109.916 2263.592
432	2310		-	-	9.0	89° 40'	+13.4	+4.4		4997.7		+212	-2300	109.946 2263.264
433	2640		262 34	-	7.3	89° 40'	+15.4	+8.1		5001.4		+242	-2629	109.976 2262.935
434	2970		-	-	7.2	89° 40'	+17.3	+10.1		5003.4		+273	-2957	110.007 2262.607
435	3300		-	-	7.2	89° 40'	+19.2	+12.0		5005.3		+303	-3286	110.037 2262.278
436	3630		-	-	8.1	89° 40'	+21.1	+13.0		5006.3		+333	-3615	110.067 2261.949
437	3960		-	-	7.4	89° 40'	+23.0	+15.6		5008.9		+363	-3943	110.097 2261.621

(scrap)  
NOTE - 3120 offset south between 420 - 421

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-18-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S.	LINE NO.	7	PAGE	32	
AREA	UTAH	TOPO MAP	Temple mtn - 15'	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									4993.3					
438	4285		262 39 40	+12.7	5.8	89° 40'	+24.9	+19.1			TP	+400	-4266	110,132 2,261,298
438	4285				6.3	270° 20'	+24.9	+18.6	+1833	5012.1	TP	-2		
	3625		82° 24 45	-	+6.5	90° 30'	+31.6	+38.1	5050.2		BS	+323	-3610	
	3625				+6.6	269° 30'	+31.6	+38.2			BS	+2		
439	3296		82° 30	-	6.3	90° 28'	-26.8	-33.1		5017.1		-299	+3282	110,158 2,260,970
440	2970		-	+12.7	6.5	90° 30'	-25.9	-32.4		5017.8		-269	+2958	110,188 2,260,646
441	2640		-	-	5.9	90° 30'	-23.0	-28.9		5021.3		-239	+2629	110,218 2,260,317
442	2310		-	-	6.5	90° 30'	-20.2	-26.7		5023.5		-209	+2300	110,248 2,259,988
443	1980		-	-	6.0	90° 30'	-17.3	-23.3		5026.9		-179	+1972	110,278 2,259,660
444	1650		-	-	6.3	90° 30'	-14.4	-20.7		5029.5		-150	+1643	110,307 2,259,331
445	1228		82° 49 30	-	6.5	90° 30'	-10.7	-17.2		5033.0	41	-118	+1222	110,339 2,258,910
445	1320		82° 30	+12.7	6.3	90° 30'	-11.5	-17.8		5032.4		-126	+1315	110,337 2,259,003
446	990		-	-	9.2	90° 20'	-5.8	-15.0		5035.2		-90	+986	110,367 2,258,674
447	660		-	-	8.4	90° 20'	-3.8	-12.2		5038.0		-60	+657	110,397 2,258,345
448	330		-	-	6.6	90° 20'	-1.9	-8.5		5041.7		-30	+329	110,427 2,258,017
449	0				5.1	-		-5.1		5045.1	π	0	0	110,457 2,257,688
450	330		262 28	+12.7	5.4	89° 10'	+4.8	-0.6		5049.6		+30	-329	110,487 2,257,359
451	660		-	-	5.8	89° 10'	+9.6	+3.8		5054.0		+59	-657	110,516 2,257,031
452	990		-	-	9.6	89° 10'	+14.4	+4.8		5055.0		+89	-986	110,546 2,256,702
453	1320		-	-	6.9	89° 20'	+15.4	+8.5		5058.7		+119	-1315	110,576 2,256,373

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-18-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		33			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Temple mtn 45'		UTAH		EMERY								W. CASSIDY	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5050.2						
454	1650		262° 28'	+12.7	8.1	89° 20'	+19.2	+11.1		5061.3		+149	-1643	110,606	2,256,045
455	1980		- -	-	8.4	89° 20'	+23.0	+14.6		5064.8		+178	-1772	110,635	2,255,716
456	2310		- -	-	8.2	89° 20'	+26.9	+18.7		5068.9		+208	-2301	110,665	2,255,387
457	2640		- -	-	8.7	89° 20'	+30.7	+22.0		5072.2		+238	-2629	110,695	2,255,059
458	2970		- -	-	11.2	89° 20'	+34.6	+23.4		5073.6		+267	-2958	110,724	2,254,730
459	3297		262° 34'	-	12.2	89° 20'	+38.4	+26.2		5076.4		+303	-3283	110,760	2,254,405
460	3620		263° 34' 52"	-	8.8	89° 26'	+35.8	+27.0		5077.2	TP	+396	-3598	110,855	2,254,090
460	3620				8.7	276° 34'	+35.8	+27.1			TP	+2			
	2636		95° 43' 08"	+12.7	7.8	90° 50'	+38.3	+46.1			BS	+833	-2501		
	2636				7.5	269° 10'	+38.3	+45.8	+593	5123.1	BS	+2			
461	2310		95° 45'	-	10.2	90° 50'	-33.6	-43.8		5079.3		-731	+2191	110,959	2,253,780
462	1980		- -	-	9.2	90° 50'	-28.8	-38.0		5085.1		-627	+1878	111,063	2,253,467
463	1650		- -	-	6.6	90° 50'	-24.0	-30.6		5092.5		-522	+1565	111,168	2,253,154
464	1320		- -	-	6.9	90° 50'	-19.2	-26.1		5097.0		-418	+1252	111,272	2,252,841
465	990		95° 45'	+12.7	4.0	90° 50'	-14.4	-18.4		5104.7		-313	+939	111,377	2,252,528
466	660		- -	-	10.3	90° 10'	-1.9	-12.2		5110.9		-209	+626	111,481	2,252,215
467	330		- -	-	8.2	90° 10'	-1.0	-9.2		5113.9		-104	+313	111,586	2,251,902
468	0				5.1	-		-5.1		5118.0	X	0	0	111,690	2,251,589
469	330		275° 49'	-	6.6	89° 10'	+4.8	-1.8		5121.3		+105	-313	111,795	2,251,276
470	660		-	✓	7.7	89° 10'	+9.6	+1.9		5125.0		+210	-626	111,900	2,250,963



SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-18-85		B. Gotcamp		B. SALDIVAR		6834		B.S.		7		35			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Tempe mtn - 15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5253.8						
TP	1166		285° 51' 28"	+12.7	4.2	89° -	+20.4	+16.2	}	5270.0	TP	+557	-1024	113.727	2246.197
TP	1166				4.1	271° -	+20.4	+16.3		TP	"				
	1470		100° 29' 52"	-	+9.9	90° 30'	+12.8	+22.7	}	5292.7	BS	+579	-1351		
	1470				+9.8	269° 30'	+12.8	+22.6		BS	"				
486	1317		99° 55'	-	9.4	90° 30'	-11.5	-20.9		5271.8		-506	+1216	113.802	2246.062
487	989		98° -	-	8.8	90° 40'	-11.5	-20.3		5272.4		-350	+925	113.958	2245.771
488	660		96° 10'	-	12.0	90° 40'	-7.7	-19.7		5273.0		-213	+625	114.095	2245.471
+	513		105° 41' 54"	-	5.7	91° 04'	-9.5	-15.2		5277.5		-244	+451	114.064	2245.297
489	330		96° 10'	-	5.0	91° 34'	-9.0	-14.0		5278.7		-107	+312	114.201	2245.158
490	0				5.1	-		-5.1		5287.6	X	0	0	114.308	2244.846
491	330		279° 20'	+12.7	5.1	91° -	-5.8	+10.9		5281.8		+124	-306	114.432	2244.540
492	633		295° -	-	6.5	-		-6.5		5286.2		+387	-501	114.695	2244.345
493	949		302° -	-	9.9	-		-9.9		5282.8		+668	-675	114.976	2244.171
494	1273		305° 05'	-	5.9	-		-5.9		5286.8		+943	-855	115.251	2243.991
495	1602		304° 40'	-	6.0	TH	+8.0	+2.0		5294.7		+1179	-1085	115.487	2243.761
TP	1664		304° 19' 18"	-	8.8	TH	+8.3	-0.5	}	5292.2	TP	+1217	-1134	115.527	2243.712
TP	1664				8.7	TH 27° -	+8.3	-0.4		TP	"				
	927		115° 06' 39"	+12.7	+13.0	89° -	-16.2	-3.2	}	5289.0	BS	+568	-732		07' 50"
	927				+12.9	271° -	-16.2	-3.3		BS	"				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-18-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S.	LINE NO.	7	PAGE	36	
AREA	UTAH	TOPO MAP	Temple mtn. - 15'	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH +	EAST +	COORDINATES		REMARKS
												SOUTH -	WEST -	Y	X	
												LAT.	DEP.			
									5289.0							
496	659		115° 25'	+12.7	10.4	89° 20'	+7.7	-2.7		5286.3		-407	+518	115.689	2243.498	
497	330		116° 40'	-	6.7	88° 50'	+6.7	+0.0		5289.0		-209	+255	115.887	2243.235	
498	0				5.1	-		-5.1		5283.9	TP	0	0	116.096	2242.980	
499	330		301° 35'	-	8.2	-		-8.2		5280.8		+230	-236	116.326	2242.744	
500	659		303° 20'	-	11.4	-		-11.4		5277.6		+474	-458	116.576	2242.522	
501	986		305° 35'	-	11.6	-		-11.6		5277.4		+736	-656	116.832	2242.324	
502	1316		306° 37' 16"	-	11.6	-		-11.6		5277.4	TP	+998	-858	117.094	2242.122	
502	1316				11.5	270°		-11.5			TP					
	989		129° 19' 05"	+12.7	7.0	-		+7.0	5284.4		BS	+780	-609			
	989			+11.9	TM	-4.9		+7.0			BS					
Bm	1509		182° 59' 25"	-	4.0	89° 10'	+21.9	+17.9		5302.3	Bm	-1453	-408	116.421	2241.105	g-116.365 x=2,241.110 S. GEOPHYSICAL SURVEY FILE 5302: 5-11 1921
503	660		129° 37'	-	8.0	-		-8.0		5276.4		-522	+403	117.352	2241.916	
504	330		- -	-	5.5	-		-5.5		5278.9		-261	+202	117.613	2241.715	
505	237		131° 06' 34"	-	4.8	-		-4.8		5279.6		-191	+140	117.683	2241.653	
505	0				5.1	-		-5.1		5279.3	TP	0	0	117.874	2241.513	
506	330		309° 58'	+12.7	6.1	89° 30'	+2.9	-3.2		5281.2		+262	-200	118.136	2241.313	
507	660		- -	-	8.2	89° -	+11.5	+3.3		5287.7		+525	-400	118.399	2241.113	
508	990		- -	-	8.1	89° -	-17.3	+9.2		5293.6		+787	-600	118.661	2240.913	
TP	1025		310° 06' 58"	+13.0	5.6	89° 14'	+13.7	+8.1		5292.5	TP	+820	-615	118.694	2240.898	
TP	1025				5.3	270° 46'	+13.7	+8.2			TP					

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-18-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		37			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Temple mtn. -15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5292.5						
	380		106° 20' 04"	+13.0	+12.2	-		+12.2	5304.7		BS	+186	-331		
	380				+10.3	BH	+1.9	+12.2			BS				
509	94		93 -	-	6.1	91° 20'	-2.2	-8.3		5296.4		-26	+90	118.854	2240657
	X	0			5.1	-		-5.1		5299.6	X	0	0	118.880	2240567
510	233		263° 40'	-	6.3	89° 20'	+2.7	-3.6		5301.1		+27	-231	118.907	2240336
511	561		259° 15'	-	5.3	89° 20'	+6.5	+1.2		5305.9		+22	-561	118.902	2240006
512	890		262° 16' 08"	-	5.2	89° -	+15.5	+10.3		5315.0	TP	+82	-886	118.962	2239681 across sta.
512	890				5.1	271° -	+15.5	+10.4			TP				
	1649		101° 43' 22"	+13.0	+10.7	-		+10.7			BS	+690	-1498		
	1649				+10.6	270° -		+10.6	5325.6		BS				
513	1320		101° 05'	-	5.4	-		-5.4		5320.2		-539	+1205	119.113	2239388
514	990		- -	-	6.3	-		-6.3		5319.3		-404	+904	119.248	2239087
515	660		- -	-	8.2	-		-8.2		5317.4		-269	+603	119.383	2238786
516	336		- -	-	9.4	-		-9.4		5316.2		-135	+301	119.517	2238484
517	0				5.1	-		-5.1		5320.5	X	0	0	119.652	2238183
518	329		295° 52'	+13.0	5.8	89° 10'	+4.8	-1.0		5324.6		+206	-256	119.858	2237927
519	652		290° 25'	-	6.4	89° -	+11.4	+5.0		5330.6		+359	-544	120.011	2237639
520	975		285° 15'	-	5.5	89° -	+17.0	+11.5		5337.1		+461	-859	120.113	2237324
521	1303		284° 29' 30"	-	7.4	89° -	+22.7	+15.3		5340.9	TP	+601	-1156	120.253	2237027
521	1303				7.3	271° -	+22.7	+15.4			TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10- - 85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		38			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Temple mtn. -15		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										5340.9					
	327		108° 19' 30"	+13.0	8.2	-		+8.2	5349.1		BS	+170	-279		
	327				6.6	BM	+11.6	+8.2		BS					
522	0				5.1	-		-5.1		5344.0	X	0	0	120.423	2236.748
523	327		309 -	-	9.2	88 -	+11.4	+2.2		5351.3		+258	-201	120.681	2236.547
524	656		312° 30'	-	6.7	88 -	+22.9	+16.2		5365.3		+541	-372	120.964	2236.336
TP	874	873.4	312° 27' 40"	-	3.6	87 50	+33.0	+29.4		5378.5	TP	+719	-495	121.142	2236.253
TP	874				3.5	272° 10'	+33.0	+29.5			TP				
	819		108° 13' 10"	+13.0	9.0	-		+9.0	5387.5		BS	+425	-700		
	819				4.9	BM	+4.1	+9.0		BS					
525	703		108° 10'	-	12.6	-		-12.6		5374.9		-364	+602	121.203	2236.155
526	375		105° 10'	-	10.1	-		-10.1		5377.4		-177	+331	121.390	2235.884
527	47		113° 20'	-	3.2	-		-3.2		5384.3		-28	+38	121.539	2235.591
X	0				5.1	-		-5.1		5382.4	X	0	0	121.567	2235.553
528	285		269° 30'	+13.0	5.3	88 -	+9.9	+4.6		5392.1		+62	-278	121.629	2235.275
529	612		265° 40'	-	8.7	88 -	+21.4	+12.7		5400.2		+92	-605	121.659	2234.948
<del>530</del>					7.9	88 -									
TP	825		265° 04' 39"	-	6.0	88 -	+28.8	+22.8		5410.3	TP	+116	-816	121.683	2234.737
TP	825				5.9	272 -	+28.8	+22.9			TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-21-85		B. Cotcamp		B. SALDIVAR		6834		B.S		7		39			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Temple Mtn. -15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5410.3						
	1586		107° 26' 10"	+13.0	6.6	91° 20'	+36.9	+43.5	5453.7		BS	+803	-1367		
	1586				6.5	268° 40'	+36.9	+43.4			BS				
530	1484		109° 35'	-	7.6	91° 30'	-38.8	-46.4		5407.3		-799	+1250	121.687	2,234,620
531	1295		113° 09' 40"	-	10.2	91° 40'	-37.7	-47.9		5405.8		-764	+1045	121.722	2,234,415 y-Inter
531	1173		113° 50'	-	11.0	91° 40'	-34.1	-45.1		5408.6		-703	+939	121.783	2,234,309
532	844		113° 45'	-	8.4	92° 10'	-31.9	-40.3		5413.4		-505	+676	121.981	2,234,046
533	517		111° 25'	-	12.6	92° 10'	-19.5	-32.1		5421.6		-292	+427	122.194	2,233,797
534	189		116° -	-	9.5	92° 10'	-7.1	-16.6		5437.1		-119	+147	122.367	2,233,517
π	0				5.1	-		-5.1		5448.6	π	0	0	122.486	2,233,370
535	150		264° 10'	+13.0	6.3	90° 30'	-1.3	-7.6		5446.1		+19	-149	122.505	2,233,221
536	475		275° 05'	-	6.2	89° 30'	+4.1	-2.1		5451.6		+147	-452	122.633	2,232,918
537	805		- -	-	10.3	89° 30'	+7.0	-3.3		5450.4		+250	-765	122.736	2,232,605
538	1128		272° -	-	6.8	89° 30'	+9.8	+3.0		5456.7		+292	-1090	122.778	2,232,280
539	1169		276° 55' 09"	+13.0	10.6	89° 10'	+17.0	+6.4		5460.1		+281	-1135	122.767	2,232,235 y-Inter.
539	1449		268° 40'	-	5.1	88° 40'	+33.7	+28.0		5482.3		+293	-1419	122.779	2,231,951
540	1778	177.1	268° 20'	-	7.4	88° 10'	+56.9	+49.5		5503.2		+349	-1742	122.835	2,231,628
541	2106	2104.7	268° 45'	-	6.3	88° -	+73.5	+67.2		5520.9		+429	-2061	122.915	2,231,309
542	2421	2419.0	270° 55'	-	5.3	87° 40'	+98.6	+93.3		5547.0		+582	-2348	123.068	2,231,022
543	2744	2741.0	270° 56' 45"	-	8.1	87° 20'	+127.7	+119.6		5573.4	TP	+661	-2660	123.147	2,230,710
543	2744				7.8	272° 40'	+127.7	+119.9			TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-21-85		B. Cotcamp		B. SALDVAR		6834		B.S.		7		40			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Temple Mtn - 15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										5573.4					
	1735	1731.8	85° 13' 45"	+13.0	15.1	93° 30'	+105.9	+121.0			BS	+248	-1714		
	1735				15.0	266° 30'	+105.9	+120.9	5694.3		BS				
544	1460	1454.4	79° 30'	-	6.1	95° -	-127.2	-133.3		5561.0		-63	+1453	123.332	2,230,449
545	1150	1144.7	82° 35'	-	7.5	95° 30'	-110.2	-117.7		5576.6		-111	+1139	123.284	2,230,135
546	829	825.2	85° 15'	-	9.5	95° 30'	-79.5	-89.0		5605.3		-118	+817	123.277	2,229,813
547	509	506.7	87° 10'	-	9.4	95° 30'	-48.8	-58.2		5636.1		-89	+499	123.306	2,229,495
548	178	177.2	87° 35'	-	6.1	95° 30'	-17.1	-83.2		5671.1		-33	+174	123.362	2,229,170
π	0				5.1	-		-5.1		5689.2	π	0	0	123.395	2,228,996
549	152		259° 30'	+13.0	4.2	85° -	+13.2	+9.0		5703.3		+7	-152	123.402	2,228,844
550	479	477.1	262° 37'	-	4.8	84° 50'	+43.1	+38.3		5732.6		+47	-475	123.442	2,228,521
551	803	799.7	268° 20'	-	7.9	84° 50'	+72.3	+64.4		5758.7		+157	-784	123.552	2,228,212
TP	994	990.5	269° 14' 50"	-	7.7	85° 10'	+83.8	+76.1		5770.4	TP	+210	-968	123.605	2,228,028
TP	994				7.6	274° 50'	+83.8	+76.2			TP				
	861		93° 02' 58"	+13.0	10.0	92° -	+30.0	+46.0			BS	+238	-827		
	861				9.9	268° -	+30.0	+39.9	5810.3		BS				
552	724		94° -	-	5.7	92° 20'	-29.5	-35.2		5775.1		-212	+692	123.631	2,227,893
553	396		96° 55'	-	9.0	92° 20'	-15.0	-24.0		5786.3		-135	+372	123.708	2,227,573
554	68		102° 10'	-	5.6	92° 20'	-2.8	-8.4		5801.9		-29	+62	123.814	2,227,263
π	0				5.1	-		-5.1		5805.2	π	0	0	123.843	2,227,201
555	255		300° 50'	-	7.0	87°	+13.3	+6.3		5816.6		+177	-184	124.020	2,227,017

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-21-85		B. Cotamp		B. SALDIVAR		6834		B.S.		7		41			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Temple mtr- 15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									5810.3						
556	566	564.6	284° 40'	+13.0	6.5	86° -	+39.5	+33.0		5843.3		+262	-500	124,105	2,226,701
TP	726	724.2	284° 20' 10"	-	8.6	86° -	+50.6	+50.0		5860.3	TP	+333	-643	124,176	2,226,559
TP	726				8.5	274° -	+50.6	+50.1			TP				
	358	356.6	138° 29' 54"	-	+13.0	95° -	+31.2	+44.2			BS	+313	-170		
	358				+12.9	265° -	+31.2	+44.1	5904.4		BS				
557	225	224.0	112° 25'	+13.0	6.5	95° 30'	-21.6	-28.1		5876.3		-130	+183	124,359	2,226,571
558	134		16° 30'	-	5.6	87° 20'	+6.2	+0.6		5905.0		+117	+66	124,606	2,226,454
X	0				5.1	-		-5.1		5899.3	X	0	0	124,489	2,226,388
559	320	319.3	299° -	+13.0	4.6	86° 20'	+20.5	+15.9		5920.3		+214	-237	124,703	2,226,151
560	634	633.0	287° 05'	-	6.9	86° 50'	+35.0	+28.1		5932.5		+317	-548	124,806	2,225,840
TP	881	880.1	277° 59' 39"	-	6.8	87° 20'	+41.0	+34.2		5938.6	TP	+315	-822	124,804	2,225,566
TP	881				6.7	272° 40'	+41.0	+34.3			TP				
	226		109° 22' 12"	-	+11.6	92° -	+7.9	+19.5			BS	+121	-191		
	226				+10.9	92° 10'	+8.5	+19.4	5958.0		BS				
561	175		164° 25'	+13.0	5.3	93° 30'	-10.7	-16.0		5942.0		-81	+155	124,844	2,225,530
X	0				5.1	-		-5.1		5952.9	X	0	0	124,925	2,225,375
562	153		253° 20'	-	5.2	91° -	-2.7	-7.9		5950.1		-10	-153	124,915	2,225,222
TP	230		242° 50' 16"	-	5.0	91° -	-4.0	-9.0		5949.0	TP	-56	-223	124,869	2,225,152
TP	230				4.9	269° -	-4.0	-8.9			TP				

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-21-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S.	LINE NO.	7	PAGE	48	
AREA	UTAH	TOPO MAP	Temple mtn. -15'	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
										5949.6				
	1248	1245.0	42° 30' 39"	+13.0	7.3	94° -	+87.1	+94.4	6043.4		BS	-705	-1026	
	1248				7.2	266° -	+87.1	+94.3		BS				
563	1084	1079.9	56° 50'	-	8.5	95° -	-94.5	-103.0		5940.4		+476	+969	124.440 2,225,095
564	955	951.4	68° 05'	-	9.1	95° -	-88.2	-92.3		5951.1		+147	+940	124.311 2,225,066
565	682	680.3	78° -	-	11.7	94° -	-47.10	-59.3		5984.1		-12	+680	124.152 2,224,806
566	364	363.3	87° -	-	5.1	93° 30'	-22.2	-27.3		6016.1		-63	+358	124.161 2,224,484
567	47		123° 40'	-	6.6	93° 30'	-2.9	-9.5		6033.9		-34	+32	124.130 2,224,158
X	0				5.1	-		-5.1		6038.3	X	0	0	124.164 2,224,126
568	279		323° 25'	+13.0	5.4	89° -	+4.9	-0.5		6042.9		+256	-112	124.420 2,224,014
569	599		318° 10'	-	6.0	88° -	+20.9	+14.9		6058.3		+525	-289	124.689 2,223,837
570	909		309° 30'	-	5.3	88° -	+31.7	+26.4		6069.8		+721	-553	124.885 2,223,573
571	1230	1229.1	305° 25'	-	5.9	87° 50'	+46.5	+40.6		6084.0		+919	-816	125.083 2,223,310
572	1555	1554.1	302° 55' 22"	-	10.0	88° -	+54.3	+44.3	6146.6		TP	+1116	-1081	125.280 2,223,045
572	1555				9.9	272° -	+54.3	+44.4		TP				
	1503	1502.1	122° 37' 18"	+13.0	6.4	92° -	+52.5	+58.9			BS	+1074	-1051	
	1503				6.3	268° -	+52.5	+58.8			BS			
573	1177		124° 20'	-	9.4	92° -	-41.1	-50.5		6096.1		-865	+798	125.489 2,222,792
574	849		122° 45'	-	11.7	92° -	-29.6	-41.3		6105.3		-608	+592	125.746 2,222,586
575	521		119° 50'	-	10.4	92° -	-18.2	-28.6		6118.0		-354	+382	126.000 2,222,376
576	191		117° 40'	-	8.8	92° -	-6.7	-15.5		6131.1		-124	+145	126.230 2,222,139

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-21-85	INSTRUMENT MAN	B. Cotamp	ROD MAN	B. SALVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S.	LINE NO.	7	PAGE	43	
AREA	UTAH	TOPO MAP	Tempe mtn. -15	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									6146.6										
K	0				5.1	-		-5.1		6141.5	K	0	0	126.354	2.221.994				
577	139		299 -	+13.0	5.6	90° 30'	-1.2	-6.8		6139.8		+93	-103	126.447	2.221.891				
578	469		-	-	5.4	89° 20'	+5.5	+0.1		6146.7		+314	-349	126.668	2.221.645				
TP	636		296° 16'	-	4.2	89° 20'	+7.4	+3.2		6149.8	TP	+403	-492	126.757	2.221.502				
TP	636				4.1	270° 40'	+7.4	+3.3			TP								
	738		165° 51' 17"	+13.0	14.1	BM	+3.7	+17.8	6167.6		BS	+738	-15						
	738				14.0	BM <sub>270</sub>	+3.7	+17.7			BS								
579	737		177° 46'	-	6.7	91° 10'	-15.0	-21.7		6145.9		-724	-138	126.771	2.221.349				
580	663		201° 28'	-	6.3	90° 40'	-7.7	-14.0		6153.10		-547	-375	126.948	2.221.112				
581	534		223° 45'	-	5.9	89° 50'	+1.0	-4.3		6163.3		-293	-447	127.262	2.221.040				
582	235		230° 55'	-	4.7	89° 20'	+2.7	-2.0		6165.6		-103	-211	127.392	2.221.276				
K	0				5.1	-		-5.1		6162.5	K	0	0	127.495	2.221.487				
Y1	165		330° 50' 18"	+13.0	4.4	87° 30'	+7.2	+2.8		6170.4		+158	-46	127.653	2.221.441				
583	173		334° 25'	-	4.7	87° 30'	+7.5	+2.8		6170.4		+169	-38	127.664	2.221.449				
584	501		335° 45'	-	4.5	87° 30'	+21.9	+17.4		6185.0		+491	-98	127.986	2.221.389				
585	828		330° 10'	-	8.3	87° 20'	+38.5	+30.2		6197.8		+793	-240	128.288	2.221.247				
TP	929	927.9	328° 43' 26"	-	9.4	87° 10'	+45.9	+36.5		6204.1	TP	+881	-291	128.376	2.221.194				
TP	929				9.3	272° 50'	+45.9	+36.6			TP		-2						

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-22-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		44			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Temple Mtn. -15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6204.1						
	489		115° 11' 39"	+13.0	9.5	-		+9.5	6213.6		BS	+302	-384		
	489				11.9	74	-2.4	+9.5		BS					
586	269		110° 55'		5.3	89° 40'	+1.6	-3.7		6209.9		-150	+223	128,528	2,221,031
	π	0			5.1	-		-5.1		6208.5	π	0	0	128,678	2,220,808
587	97		225° -	+13.0	5.1	88° 40'	+2.3	-2.8		6210.8		-51	-82	128,627	2,220,726
588	418		242° 55'	-	10.9	88° 50'	+8.5	-2.4		6211.2		-102	-405	128,576	2,220,403
TP	559		244° 27' 39"	-	4.6	87° 30'	+4.9	+0.3		6213.9	TP	-121	-546	128,557	2,220,260
TP	559				4.7	270° 30'	+4.9	+0.2			TP				
	2192	2190.7	108° 04' 40"	+13.0	11.6	92° -	+76.5	+88.1	6302.0		BS	+1131	-1876		
	2192				11.7	268° -	+76.5	+88.2		BS					
589	2144		112° 50'	-	8.1	92° 20'	-87.3	-95.4		6206.6		-1255	+1738	128,433	2,220,120
590	1877		117° 41'	-	7.3	92° -	-65.5	-72.8		6229.2		-1224	+1423	128,464	2,219,805
591	1666		125° 38'	-	10.4	91° 40'	-48.5	-58.9		6243.1		-1250	+1101	128,438	2,219,483
592	1447		134° 45'	-	10.8	91° 40'	-42.1	-52.9		6249.1		-1224	+772	128,464	2,219,154
593	1220		144° 50'	+13.0	10.7	91° 40'	-35.5	-46.2		6255.8		-1130	+460	128,558	2,218,842
594	934		152° 55'	-	7.8	92° 20'	-38.0	-45.8		6256.2		-906	+227	128,782	2,218,609
595	619		147° 30'	-	6.6	94° 40'	-50.4	-57.0		6245.0		-584	+207	129,104	2,218,587
596	291		148° 40'	-	9.4	94° 40'	-23.7	-33.1		6268.9		-276	+92	129,412	2,218,474
	π	0			5.1	-		-5.1		6296.9	π	0	0	129,688	2,218,382
597	85		38° 35'	-	10.1	94° 40'	-6.9	-17.0		6285.0		+53	+67	129,741	2,218,449

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-22-85		B. Cotcamp		B. S. DIVAR		6834		B.S.		7		45			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Temple mtn. -15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6362.0						
598	354		332 -	+13.0	5.8	94° 10'	-25.7	-31.5		6270.5		+342	-92	130,030	2,218,290
599	666		320 20	-	5.2	91° 30'	-17.4	-22.6		6279.4		+595	-299	130,283	2,218,083
600	958		329 -	-	12.0	89° 24'	+10.0	-2.0		6300.0		+911	-296	130,599	2,218,086
601	1261		322 35	-	8.5	88° 30'	+33.0	+24.5		6326.5		+1148	-521	130,836	2,217,861
602	1587		322° 30'	+13.0	5.3	88° 10'	+50.8	+45.5		6347.5		+1444	-658	131,132	2,217,724
603	1915		323° 40'	-	9.3	87° 30'	+83.5	+74.2		6376.2		+1758	-758	131,446	2,217,624
604	2241		322° 20'	-	8.0	87° 20'	+104.3	+96.3		6398.3		+2037	-935	131,725	2,217,447
TP	2481	2478.3	321 35 11	-	9.6	87° 20'	+115.4	+105.8			TP	+2239	-1064	131,927	2,217,316
TP	2481				9.9	222° 40'	+115.4	+105.5	+105.78	6407.7	TP		-2		
	2128		202 29 14	+13.0	7.6	89° -	-37.1	-29.5	6378.2		BS	+1732	+1235		
	2128				7.5	291° -	-37.1	-29.6			BS		-2		
605	2026		203 10	-	8.8	89° 10'	+29.5	+20.7		6398.9		-1636	-1196	132,023	2,217,353
606	1707		204 50	-	18.1	89° 18'	+20.9	+2.8		6381.0		-1348	-1047	132,311	2,217,502
607	1387		201 50	-	9.5	89° 30'	+12.1	+2.6		6380.8		-1138	-792	132,521	2,217,757
608	1090		195 09	-	7.4	-		-7.4		6370.8		-961	-514	132,698	2,218,035
609	786		188 30	-	6.8	91° 10'	-16.0	-22.8		6355.4		-731	-288	132,928	2,218,261
610	457		189 30	-	10.0	91° 10'	-9.3	-19.3		6358.9		-422	-175	133,237	2,218,374
611	127		185 -	-	8.0	91° 10'	-2.6	-10.6		6367.6		-121	-39	133,538	2,218,510
X	0				5.1	-		-5.1		6373.1	X	0	0	133,659	2,218,549
612	203		2 -	+13.0	7.1	91° 10'	-4.1	-11.2		6367.0		+196	+53	133,855	2,218,602

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-22-85	INSTRUMENT MAKE	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S.	LINE NO.	7	PAGE	46	
AREA	UTAH	TOPO MAP	Temple mtn. -15'	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									6378.2					
613	534		2° 12'	+13.0	4.7	91° 10'	-10.9	-15.6		6362.6		+ 515	+140	134.174 2,218.689
614	844		355° 40'	-	6.1	-		-6.1		6372.1		+ 834	+127	134.493 2,218.676
615	1142		347° 20'	-	6.9	89° -	+19.9	+13.0		6391.2		+ 1142	+7	134.801 2,218.556
616	1428	1427.6	339° 56'	-	8.5	88° 40'	+33.2	+24.7		64102.9		+ 1417	-176	135.076 2,218.373
617	1748	1747.1	337° 05'	-	5.8	88° 10'	+55.9	+50.1		6428.3		+ 1721	-301	135.380 2,218.248
TP	2087	2085.6	337° 41' 12"	-	5.1	87° 54'	+76.5	+71.4		6449.6	TP	+2058	-338	135.717 2,218.209
TP	2087				5.2	272° 06'	+76.5	+71.3			TP		-2	
	705		229° 28' 10"	+13.0	7.9	89° -	-12.3	-4.4	6445.2		BS	+326	+625	
	705				7.8	271° -	-12.3	-4.5			BS		-2	
618	647		222° 55'	-	7.1	89° 20'	+7.5	+0.4		6445.6		- 363	-536	135.680 2,218.296
619	347		207° 10'	-	6.6	90° 40'	-4.0	-10.6		6434.6		-265	-224	135.778 2,218.608
620	140		159° -	-	10.6	90° 40'	-1.6	-12.2		6433.0		-139	+19	135.904 2,218.851
X	0				5.1	-		-5.1		6440.1	X	0	0	136.043 2,218.832
621	191		326° -	+13.0	7.0	87° 20'	+8.9	+1.9		6449.1		+ 178	-68	136.221 2,218.764
622	521	519.7	328° -	-	7.0	86° -	+36.3	+29.3		6474.5		+491	-169	136.534 2,218.663
623	851	848.9	- -	-	6.4	86° -	+59.4	+53.0		6498.2		+ 803	-276	136.846 2,218.556
624	1181	1178.1	- -	-	9.6	86° -	+82.4	+72.8		6518.0		+ 1114	-384	137.157 2,218.448
625	1511	1507.9	- -	-	8.0	86° 20'	+96.6	+88.10		6533.8		+1426	-491	137.469 2,218.341
TP	1669	1665.6	328° 11' 12"	-	9.8	86° 20'	+106.7	+96.9		6542.1	TP	+1577	-537	137.626 2,218.293
TP	1669				9.7	273° 40'	+106.7	+97.0			TP		-2	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-22-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		47			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Temple mtn. -15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFER-ENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
										6542.1					
	2551	2549.2	163° 20' 23"	+13.0	12.1	92° 10'	+96.4	+108.5	6650.6		BS	+2544	-163		
	2551				+12.0	267° 50'	+96.4	+108.4			BS		-2		
626	2379	2377.1	163° 27'	-	6.3	92° 18'	-95.5	-101.8		6548.8		-2373	+147	137.791	2,218.275
627	2050	2048.3	-	-	5.6	92° 20'	-83.5	-89.1		6561.5		-2044	+127	138.120	2,218.255
628	1720	1718.1	163° 18'	-	9.5	92° 40'	-80.0	-89.5		6561.1		-1715	+111	138.449	2,218.239
629	1390	1388.5	-	+13.0	12.5	92° 40'	-64.7	-77.2		6573.4		-1386	+90	138.779	2,218.218
630	1061	1059.6	-	-	10.2	93°	-55.5	-65.7		6584.9		-1057	+68	139.107	2,218.196
631	731	730.0	-	-	8.4	93°	-38.3	-46.7		6603.9		-728	+47	139.436	2,218.175
632	401		163° 30'	-	5.3	92° 50'	-19.8	-25.1		6625.5		-400	+24	139.764	2,218.152
633	71		-	-	5.4	90° 50'	-1.0	-6.4		6644.2		-71	+4	140.093	2,218.132
TP	0				5.1	-		-5.1		6645.5	TP	0	0	140.164	2,218.128
634	260		0° 35'	+13.0	6.0	89° 30'	+2.3	-3.7		6646.9		+253	+61	140.417	2,218.189
635	585		7° 55'	-	12.0	88° 44'	+12.9	+0.9		6651.5		+546	+209	140.910	2,218.337
636	913		10° 45'	-	6.2	89° 20'	+10.6	+4.4		6655.0		+836	+368	141.000	2,218.496
TP	1114		12° 45' 12"	-	9.1	89°	+19.4	+10.3		6660.9	TP	+1003	+484	141.167	2,218.610
TP	1114				9.0	271°	+19.4	+10.4			TP		-2		
	1614		203° 02' 52"	+13.04	11.5	-		+11.5	6672.4		BS	+1305	+950		
	1614				+11.4	270°		+11.4			BS		-2		
637	1495		201° 05'	-	7.1	90° 10'	-4.3	-11.4		6661.0		-1238	-838	141.234	2,218.720
638	1198		195° -	-	12.0	90° 20'	-7.0	-19.0		6653.4		-1058	-562	141.414	2,218.994

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-22-85		B. Cotcamp		B. SALDIVAR		6834		B.S		7		48			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Temple mtn. -15'		UTAH		EMERY								W Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6672.4						
639	895		187° 50'	+13.0	8.8	90° 40'	-10.4	-14.2		6653.2		-836	-318	141,636	2,219,240
640	570		183° 20'	-	8.8	90° 40'	-6.6	-15.4		6657.0		-547	-160	141,925	2,219,398
641	246		173° 15'	-	8.0	90° 40'	-2.9	-10.9		6661.5		-245	-27	142,227	2,219,531
π	0				5.1	-		-5.1		6667.3	π	○	○	142,472	2,219,558
642	87		330° 35'	+13.0	5.5	87° 10'	+4.3	-1.2		6671.2		+83	-25	142,555	2,219,533
643	417		330° 05'	-	6.9	87° 10'	+20.6	+13.7		6686.1		+399	-121	142,871	2,219,437
644	746		328° 15'	-	9.4	87° 10'	+36.9	+27.5		6699.9		+706	-240	143,178	2,219,318
TP	962	961.0	325° 11 31	-	8.4	87° 20'	+44.8	+36.4		6708.8	TP	+892	-357	143,364	2,219,199
TP	962				8.3	272° 40'	+44.8	+36.5			TP		-2		
	1537		127° 06 06	+13.0	13.7	91° 10'	+31.3	+45.0		6753.8	BS	+1179	-986		
	1537				13.6	268° 50'	+31.3	+44.9			BS		-2		
645	1426		127° 15'	-	9.1	91° 20'	-33.2	-42.3		6711.5		-1096	+912	143,447	2,219,123
646	1096		127° 05'	-	8.0	91° 20'	-25.5	-33.5		6720.3		-841	+703	143,702	2,218,914
647	766		126° 55'	-	7.1	91° 20'	-17.8	-24.9		6728.9		-586	+493	143,957	2,218,704
648	437		125° 30'	-	6.3	91° 20'	-10.2	-16.5		6737.3		-327	+290	144,216	2,218,501
¶	205		126° 34 40	-	6.6	90° 20'	-1.2	-7.8		6746.0	¶	-156	+133	144,387	2,218,344
649	107		129° 55'	-	6.0	-		-6.0		6747.8		-85	+65	144,458	2,218,276
π	0				5.1	-		-5.1		6748.7	π	○	○	144,543	2,218,211
650	231		283° 10'	+13.0	6.3	-		-6.3		6747.5		+102	-207	144,645	2,218,004
651	560		287° -	-	5.8	89° -	+9.8	+4.0		6757.8		+280	-485	144,823	2,217,726

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-22-85		B. Cotcamp		B. Cotcamp		6834		B.S.		7		49			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Temple Mtn - 15'		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6753.8						
652	889		287° 50'	+13.0	5.3	88° 40'	+20.7	+15.4		6769.2		+456	-763	144,999	2,217,448
653	1219		288° 20'	-	6.6	88° 24'	+34.0	+27.4		6781.2		+634	-1041	145,177	2,217,170
654	1549		288° 10'	-	5.9	88° 24'	+43.3	+37.4		6791.2		+802	-1325	145,345	2,216,886
655	1878	1877.0	287° 21' 18"	-	9.0	88° 10'	+60.1	+51.1		6804.9	TP	+949	-1620	145,492	2,216,589
655	1878				8.9	271° 50'	+60.1	+51.2			TP		-2		
	491		112° 28'	+13.0	7.7	91° -	+8.6	+16.3	6821.2		BS	+285	-400		
	491				7.6	269° -	+8.6	+16.2			BS		-2		
656	165		116° 50'	-	4.8	91° 26'	-3.8	-8.6		6812.6		-106	+127	145,671	2,216,314
TP	0				5.1	-		-5.1		6816.1	TP	0	0	145,777	2,216,187
657	191		347° -	-	6.1	87° 50'	+7.2	+1.1		6822.3		+191	±0	145,968	2,216,187
TP	236		348° 27' 24"	-	5.1	88° 50'	+4.8	-0.3		6820.9	TP	+236	+6	146,013	2,216,191
TP	236				5.1	271° 10'	+4.8	-0.3			TP		-2		
	927		155° 35' 57"	+13.0	10.0	90° 40'	+10.8	+20.8	6841.7		BS	+909	-183		
	927				10.1	269° 20'	+10.8	+20.9			BS		-2		
658	744		140° 40'	-	8.1	91° 10'	-15.1	-23.2		6818.5		-667	+330	146,255	2,216,336
659	492		122° 50'	-	6.6	91° 10'	-10.0	-16.6		6825.1		-353	+343	146,569	2,216,349
660	180		109° 15'	-	7.7	91° 10'	-3.7	-11.4		6830.3		-96	+152	146,826	2,216,158
TP	0				5.1	-		-5.1		6836.6	TP	0	0	146,922	2,216,006
661	151		275° 20'	+13.0	4.6	88° 40'	+3.5	-1.1		6840.6		+48	-143	146,970	2,215,863
662	481		273° -	-	4.8	88° 30'	+12.6	+7.8		6849.5		+133	-462	147,055	2,215,544

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-22-85		B. Cotcamp		B. SALDIVAR		6834		B.S.		7		50			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		15' Temple Mtn. Wild Horse		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6841.7						
663	810		271° 20'	+130	10.8	89° 10'	+11.8	+1.0		6842.7		+201	-785	147,123	2,215,221
664	1140		270° 35'	-	12.5	89° -	+19.9	+7.4		6849.1		+268	-1108	147,190	2,214,898
665	1470		270° 25'	-	11.8	89° -	+25.7	+13.9		6855.6		+341	-1430	147,263	2,214,576
666	1800		-	-	10.6	89° -	+31.4	+21.4		6863.1		+418	-1751	147,340	2,214,255 Temple Mtn. -15' ↑
667	2130		270° 55'	-	7.1	89° -	+37.2	+30.1		6871.8		+512	-2067	147,434	2,213,939 Wild Horse -15' ↓
TP	2278		270° 48' 58"	-	10.3	88° 52'	+45.1	+34.8			TP	+544	-2212	147,468	2,213,792
TP	2278				10.0	271° 08'	+45.1	+35.1	6879.3	6876.6	TP	+2	-2		
	846		118° 53' 57"	+130	12.5	BH	+4.2	+16.7	6893.3		BS	+565	-630		
	846				+12.4	BH 270	+4.2	+16.6			BS	+2	-2		
668	655		117° 45'	-	12.3	-		-12.3		6881.0		-428	+496	147,607	2,213,656
669	328		123° 20'	-	7.8	-		-7.8		6885.5		-237	+226	147,798	2,213,386
670	0				5.1	-		-5.1		6888.2	X	0	0	148,035	2,213,160
671	330		321° 20'	+130	3.6	-		-3.6		6889.7		+297	-143	148,332	2,213,017
672	660		-	-	8.0	-		-8.0		6885.3		+595	-286	148,630	2,212,894
TP	928		321° 40' 18"	-	11.4	BH	-4.6	-16.0		6877.3	TP	+839	-397	148,876	2,212,761
TP	928				11.3	BH 270	-4.6	-15.9			TP	+2	-2		
	1663	1661.6	115° 49' 30"	+130	13.5	87° 46'	-67.7	-54.2	6823.1		BS	+1042	-1295		
	1663				13.6	272° 20'	-67.7	-54.1			BS	+2	-2		
673	1608	1607.0	114° 55'	-	7.5	87° 56'	+58.0	+50.5		6873.6		-988	+1268	148,932	2,212,732
674	1356	1355.3	106° 45'	-	7.7	88° 08'	+44.2	+36.5		6859.6		-673	+1177	149,247	2,212,641

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-22-85		B. C. Camp		B. SALONAR		6834		B.S.		7		51			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		Wild Horse-15		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6823.1						
675	1084		98° 30'	+13.0	8.1	88° 20'	+31.5	+23.4		6846.5		-397	+1009	149.523	2212.473
676	771		92° -	-	5.9	89° 20'	+9.0	+3.1		6826.2		-200	+745	149.720	2212.209
677	478		77° 45'	-	7.4	91° 20'	-11.1	-18.5		6804.6		-6	+478	149.914	2211.942
678	243	242.0	38° 10'	-	5.7	95° 20'	-22.6	-28.3		6794.8		+152	+189	150.072	2211.653
π	0				5.1	-		-5.1		6818.0	π	0	0	149.920	2211.464
679	273	271.1	318° 23'	+13.0	6.2	96° 50'	-32.5	-38.7		6784.4		+238	-130	150.158	2211.334
680	577	575.0	301° 05'	-	5.2	94° 50'	-48.6	-53.8		6769.3		+400	-413	150.320	2211.051
681	902	899.6	299° 10'	-	7.9	94° 10'	-65.5	-73.4		6749.7		+604	-667	150.524	2210.797
682	1231	1229.3	299° 35'	-	7.7	93° -	-64.4	-72.1		6751.0		+832	-905	150.752	2210.559
683	1560	1558.5	298° 38'	-	8.2	92° 30'	-68.0	-76.2		6746.9		+1035	-1165	150.955	2210.299
684	1889	1887.2	297° 50'	+13.0	8.0	92° 30'	-82.4	-90.4		6732.7		+1234	-1428	151.154	2210.036
685	2218	2216.2	297° 15'	-	9.2	92° 20'	-90.3	-99.5		6723.6		+1432	-1691	151.352	2209.773
686	2547	2544.9	296° 45'	-	11.1	92° 20'	-103.7	-114.8		6708.3		+1627	-1957	151.547	2209.507
687	2875	2873.5	296° 20'	-	8.0	92° -	-100.3	-108.3		6714.8		+1821	-2223	151.741	2209.241
TP	3118	3116.5	295° 57' 04"	-	7.6	91° 46'	-96.1	-103.7		6719.4	TP	+1959	-2424	151.881	2209.038
TP	3118				7.7	268° 14'	-96.1	-103.8			TP	+2	-2		
	2850		108° 04' 13"	+13.0	6.3	-		+6.3	6725.7		BS	+1471	-2441		
	2850				6.2	270° -		+6.2			BS	+2	-2		
688	2764		107° 58'	-	4.2	90° 10'	-8.0	-12.2		6713.5		-1422	+2370	151.932	2208.765
689	2436		108° 20'	-	6.5	90° 40'	-28.3	-34.8		6690.9		-1267	+2681	152.087	2208.676

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-22-85	INSTRUMENT MAN	B. Cotamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.S.	LINE NO.	M	PAGE	52	
AREA	WTAM	TOPO MAP	Wild Horse,	STATE	WTAM	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									6725.7					
690	2110		109° 40'	+13.0	10.7	91° 10'	-43.0	-53.7		6672.0		-1139	+1776	152,215 2,208,371
H	1842		110° 49' 42"	-	10.8	91° 40'	-53.6	-64.4		66601.3		-1025	+1530	152,329 2,208,125
691	1784		110° 45'	-	10.7	91° 40'	-51.9	-62.6		66663.1		-991	+1483	152,363 2,208,078
692	1454		- -	+13.0	11.7	91° 40'	-42.3	-54.0		6671.7		-808	+1209	152,546 2,207,804 WILD HORSE-15T
693	1124		- -	-	11.5	91° 40'	-32.7	-44.2		6681.5		-624	+935	152,730 2,207,530 SAN RAFAEL KNOB-15
694	795		- -	-	11.8	91° 40'	-23.1	-34.9		6690.8		-442	+661	152,912 2,207,256
695	466		108° 10'	-	5.6	91° 40'	-13.6	-19.2		6706.5		-241	+399	153,113 2,206,994
696	165		79° 40'	-	5.4	90° 30'	-1.4	-6.8		6718.9		-8	+165	153,346 2,206,760
X	0				5.1	-		-5.1		6720.6	X	0	0	153,354 2,206,595
697	254		340° 10'	+13.0	5.9	88° 30'	+6.6	+0.7		6726.4		+252	-30	153,666 2,206,565
698	579		333° 20'	-	6.3	89° -	+10.1	+3.8		6729.5		+563	-137	153,917 2,206,458
699	896		326° 50'	-	7.7	89° -	+15.6	+7.9		6733.6		+841	-309	154,195 2,206,286
700	1113		313° 47'	-	7.5	88° -	+38.8	+31.3		6757.0		+931	-610	154,285 2,205,985
701	1347		302° 50'	-	6.2	87° 40'	+54.8	+48.6		6774.3		+966	-939	154,320 2,205,656
TP	1492	1490.2	298° 42' 21"	-	1.6	87° 10'	+73.8	+72.2		6797.9	TP	+991	-1113	154,347 2,205,480
TP	1492				1.5	272° 50'	+73.8	+72.3			TP	+2	-2	
	1105		79° 03' 15"	+13.0	7.2	89° 30'	-9.6	-2.4	6795.5		BS	+40	-1104	
	1105				7.1	270° 30'	-9.6	-2.5			BS	+2	-2	
702	953		81° 25'	-	17.6	89° 30'	+8.3	-9.3		6786.2		-73	+950	154,316 2,205,324
703	624		82° 05'	-	4.9	89° 30'	+54	+0.5		6796.0		-55	+622	154,334 2,204,996

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-23-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SALDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B.C.W.	LINE NO.	7	PAGE	53
AREA	UTAH	TOPO MAP	SAN RAFAEL Knob-15'	STATE	UTAH	COUNTY	EMERY	TWP		RANGE	PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -	EAST + WEST -	COORDINATES		REMARKS
												LAT.	DEP.	Y	X	
									6775.5							
704	296		86° 50'	+13.0	8.0	90° 30'	-2.6	-10.6		6784.9		-51	+292	154,338	2,204,666	
X	0				5.1	-		-5.1		6790.4	X	0	0	154,389	2,204,374	
705	64		204° 25'	-	12.2	90° 30'	-0.6	-12.8		6782.7		-51	-39	154,338	2,204,335	
706	374		242° 10'	-	12.4	90° 30'	-3.3	-15.7		6779.8		-96	-362	154,293	2,204,012	
707	684		230° -	-	7.4	90° 30'	-6.0	-13.4		6782.1		-311	-609	154,078	2,203,765	
708	1000		223° 45'	+13.0	7.7	90° 30'	-8.7	-15.9		6779.6		-548	-836	153,841	2,203,538	
709	1328		223° 50'	-	4.9	90° 30'	-11.6	-16.5		6779.0		-727	-1112	153,662	2,203,262	
710	1656		223° 55'	-	7.3	90° 30'	-14.5	-21.8		6773.7		-904	-1388	153,485	2,202,986	
TP	1767		223° 22' 36"	-	10.7	90° 30'	-15.4	-26.1		6769.4	TP	-978	-1471	153,413	2,202,901	
TP	1767				10.6	269° 30'	-15.4	-26.0			TP	-2	-2			
	1112		97° 07' 58"	+13.0	10.9	91° 20'	+25.9	+36.8		6806.2	BS	+383	-1044			
	1112				10.8	268° 40'	+25.9	+36.7			BS	+2	-2			
711	871	870.5	99° 55'	-	7.1	92° -	-30.4	-37.5		6768.7	#	-339	+802	153,459	2,202,657	
712	546	544.9	103° 45'	-	5.6	93° 40'	-34.9	-40.5		6765.7		-245	+487	153,553	2,202,342	
713	259	256.7	82° 40'	-	11.5	97° 40'	-34.6	-46.1		6760.1		-25	+255	153,773	2,202,110	
X	0				5.1	-		-5.1		6801.1	X	0	0	153,798	2,201,855	
714	281	276.7	6° 05'	+13.0	11.0	100° -	-48.8	-59.8		6746.4		+261	+90	154,059	2,201,945	
715	525	519.5	333° 15'	-	5.0	98° 20'	-76.1	-81.1		6725.1		+505	-123	154,303	2,201,732	
716	696	688.7	306° -	-	5.9	98° 20'	-100.9	-106.8		6699.4		+520	-452	154,318	2,201,403	
717	945	938.3	290° 40'	-	5.8	96° 50'	-112.4	-118.2		6688.0		+520	-781	154,318	2,201,074	

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-23-85		B. Cotcamp		B. SALDIVAR		6834		B.C. <i>lc</i>		7		54			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		SAN RAFAEL Knob-15		UTAH		Emery								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6806.2						
718	1246	1242.4	286	+13.0	6.8	94° 20'	-94.1	-100.9		6705.3		+602	-1087	154.400	2,200,768
719	1541	1538.4	292	-	7.2	93° 20'	-89.6	-96.8		6709.4		+882	-1260	154.680	2,200,595
720	1847	1845.2	296	-	6.3	92° 30'	-80.6	-86.9		6719.3		+1161	-1434	154.959	2,200,421
TP	1983	1981.4	297 26 57	-	8.4	92° 20'	-80.7	-89.1		6717.1	TP	+1285	-1508	155.085	2,200,345
TP	1983				8.5	267° 40'	-80.7	-89.2			TP	+2	-2		
	2353		112 27 15	+13.0	14.6	89° -	-41.1	-26.5	6690.5		BS	+1365	-1916		
	2353			+13.0	14.3	271° -	-41.1	-26.8	-26.6		BS	+2	-2		
721	2193		110 25	-	10.8	89° 20'	+25.5	+14.7		6705.2		-1208	+1830	155.244	2,200,257
722	1912		106 65	-	11.1	89° 30'	+16.7	+5.6		6696.1		-929	+1671	155.523	2,200,098
723	1594		103 10	-	7.3	-		-7.3		6683.2		-703	+1431	155.749	2,199,858
724	1281		106 17	-	12.1	90° 40'	-14.9	-27.0		6663.5	TP	-627	+1117	155.825	2,199,544
725	964		107 10	-	8.4	90° 20'	-5.6	-14.0		6676.5		-484	+833	155.968	2,199,260
726	640		108 -	-	9.3	90° 20'	-3.7	-13.0		6677.5		-330	+549	156.122	2,198,976
727	352		128 -	-	11.2	90° 20'	-2.0	-13.2		6677.3		-274	+222	156.178	2,198,649
K	0				5.1	-		-5.1		6685.4	K	0	0	156.452	2,198,427
728	355		183 40	+13.0	6.5	90° 20'	-2.1	-8.6		6681.9		-340	-102	156.112	2,198,325
729	618		207 40	-	8.7	89° -	+10.8	+2.1		6692.6		-469	-403	155.983	2,198,024
730	947		206 -	-	7.1	89° -	+16.5	+9.4		6699.9		-736	-596	155.716	2,197,831
731	1277		204 50	-	5.9	88° 50'	+26.0	+20.1		6710.6		-1009	-783	155.443	2,197,644

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE	10-23-85	INSTRUMENT MAN	B. Cotcamp	ROD MAN	B. SAIDIVAR	PARTY NUMBER	6834	NOTES CHECKED BY	B. Ch	LINE NO.	7	PAGE	55	
AREA	UTAH	TOPO MAP	SAN RAFAEL Knob-15	STATE	UTAH	COUNTY	EMERY	TWP		RANGE		PPM	PARTY MANAGER	W. Cassidy

STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS TP	COORDINATES		REMARKS
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.	
									6690.5					
732	1607		204° 30'	+13.0	4.7	88° 50'	+32.7	+28.0		6718.5		-1275	-978	155.177 2,197.449
733	1935		203° 10'	-	8.0	88° 34'	+48.4	+40.4		6730.9		-1562	-1142	154.896 2,197.285
734	2261		201° 30'	-	9.1	88° 34'	+56.6	+47.5		6738.0		-1863	-1281	154.589 2,197.146
735	2582	2581.1	201° 35' 02"	+13.3	10.4	88° 30'	+67.6	+57.2			TP	-2117	-1476	154.339 2,196.949
735	2582				10.3	271° 30'	+67.6	+57.3		6747.8	TP			
	2203	2201.5	58° 42' 36"	-	14.1	92° 08'	+82.4	+96.1			BS	-680	-2094	
	2203				13.8	267° 52'	+82.0	+95.8	+96.0	6843.8	BS			
736	1877	1875.4	60° 10'	-	11.1	92° 20'	-76.4	-87.5		6756.3		+534	+1798	154.197 2,196.651
737	1555	1553.2	59° 06'	-	8.8	92° 46'	-75.1	-83.9		6759.9		+470	+1481	154.133 2,196.334
738	1242	1239.9	54° 45'	-	5.8	93° 20'	-72.2	-78.0		6765.8		+463	+1150	154.126 2,196.003
739	936	934.4	48° 20'	-	12.5	93° 20'	-54.4	-66.9		6776.9		+444	+822	154.107 2,195.675
740	709	707.3	31° 40'	-	8.0	94° -	-49.5	-57.5		6786.3		+500	+500	154.163 2,195.353
π	0				5.1	-		-5.1		6838.7	π	0	0	153.663 2,194.853
741	607	605.5	3° 50'	+13.3	5.9	94° -	-42.3	-48.2		6795.6		+579	+178	154.242 2,195.031
741	595	593.6	358° 01' 40"	-	5.6	94° -	-41.5	-47.1		6796.7	741	+582	+117	154.245 2,194.970
742	673	672.0	334° 20'	-	6.7	93° 10'	-37.2	-43.9		6799.9		+656	-144	154.319 2,194.709
743	869		314° 25'	-	6.8	92° 10'	-32.9	-39.7		6804.1		+735	-464	154.398 2,194.389
744	1131		302° 45'	-	8.1	91° 10'	-23.0	-31.1		6812.7		+814	-785	154.477 2,194.068
745	1430		296° 50'	-	10.4	90° 50'	-20.8	-31.2		6812.6		+922	-1093	154.585 2,193.760

y - 154.245 x - 2,194.970  
 y - Inter Mark x - 64.  
 CORR. y - .49

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-23-85		B. Cotcamp		B. SALDIVAR		6834		B.C. W		7		56			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		SAN RAFAEL Knob-15		UTAM		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6843.8						
746	1760		297° 10'	+13.3	6.2	90° 50'	-25.6	-31.8		6812.0		+1142	-1339	154.805	2,193,514
747	2089		297° 20'	-	8.4	90° 50'	-30.4	-38.8		6805.0		+1360	-1585	155.023	2,193,268
748	2418		297° 40'	-	5.0	90° 50'	-35.2	-40.2		6803.6		+1585	-1826	155.248	2,193,027
749	2747		298° 10' 22"	+13.4	8.3	90° 34'	-27.2	-35.5			TP	+1823	-2055	155.486	2,192,798
749	2747				8.2	269° 26'	-27.2	-35.4		6808.4	TP				CONTINUED ON page # 57
TRaverse to McKay		tri-station													
TP	2705				8.7	89° 10'	+39.3	+30.6		6874.4	TP	-1087	-2477	152.576	2,192,376
TP	2705		232° 42' 18"	+13.6	8.6	270° 50'	+39.3	+30.7			TP				TRaverse to TRI-STATION
	1173				4.3	TH	-5.9	-1.6	6872.8		BS	-613	-1000		
	1173		44° 54' 06"	-	4.2	TH 220	-5.9	-1.7			BS				
	0				5.1	-		-5.1			X	0	0	151.963	2,191,376
TP	2383		219° 32' 46"	-	5.9	90° 20'	-13.9	-19.8		6853.0	TP	-1429	-1907	150.534	2,189,469
TP	2383				5.8	269° 40'	-13.9	-19.7			TP				
	2908		35° 46' -	-	11.5	90° 30'	+25.4	+36.9			BS	-1894	-2207		
	2908				11.7	269° 30'	+25.4	+36.6	36.15	6889.7	BS				
X	0				5.1	-		-5.1			X	0	0	148.640	2,187,262
A	2274		194° 27' 30"	+13.6	7.9	87° 30'	+99.2	+91.3		6981.0	A	-2005	-1069	146.635	2,186,193
A	2274				7.8	272° 30'	+99.2	+91.4			A				146.697 x 2,186,224 McKay tri-st. EL. 6981.0

SURVEY NOTES-HIGH RESOLUTION DATA

GEO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10.24-85		B. Cotcamp		B. SA-DIVAR		6834		B.C.W.		4		57			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAH		SAN RAFAEL		KJOB-15		UTAH		EMERY						W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOT DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6808.4						
	519		127° 07' 52"	+13.4	3.0	89° -	-9.1	-6.1	6802.3		BS	+401	-330		
	519				+2.9	271° -	-9.1	-6.2			BS				
750	193		119° 45'	-	5.8	-		-5.8		6796.5		-132	+141	155.755	2,192,609
π	0				5.1	-		-5.1		6797.2	π	0	0	155.887	2,192,468
751	128		268° 20'	-	5.0	TH	+0.6	-4.4		6797.9		+26	-125	155.913	2,192,343
752	455		258° 40'	-	5.9	88° 50'	+9.3	+3.4		6805.7		+16	-455	155.903	2,192,013
753	785		257° -	-	4.0	88° 50'	+16.0	+12.0		6814.3		+5	-785	155.892	2,191,683
TP	1080		256° 44' -	-	3.5	88° 50'	+22.0	+18.5			TP	+3	-1080	155.890	2,191,388
TP	1080				3.4	271° 10'	+22.0	+18.6		6820.9	TP				
	1682		86° 08' 50"	+13.4	4.4	91° -	+29.4	+33.8	6854.7		BS	+279	-1658		
	1682				+4.3	269° -	+29.4	+33.7			BS				
754	1648		86° 05'	-	4.5	91° -	-28.8	-33.3		6821.4		-272	+1625	155.897	2,191,355
755	1318		85° 35'	-	5.3	91° -	-23.0	-28.3		6826.4		-206	+1302	155.963	2,191,032
756	989		84° 50'	-	8.6	91° -	-17.3	-25.9		6828.8	π	-142	+979	156.027	2,190,709
757	659		83° 20'	-	12.7	91° -	-11.5	-24.2		6830.5		-77	+654	156.092	2,190,384
758	330		79° 20'	-	9.2	91° -	-5.8	-15.0		6839.7		-16	+330	156.153	2,190,060
759	0				5.1	-		-5.1		6849.6	π	0	0	156.169	2,189,730
760	330		258° -	+13.4	7.7	-		-7.7		6847.0		+8	-330	156.177	2,189,400
761	660		258° 30'	-	4.0	TH	+3.3	-0.7		6854.0		+22	-660	156.191	2,189,070
762	990		258° 55'	-	7.2	89° -	+17.3	+10.1		6864.8		+40	-989	156.209	2,188,741

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-24-85		B. Cotcamp		B. SALDIVAR		6834		B.C.W.		7		58			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		SAN RAFAEL Knob-15		UTAM		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6854.7						
763	1318		257° 37' 58"	+13.4	11.5	89° -	+23.0	+11.5		6866.2	TP	+24	-1318	156,193	2,188,412
763	1318				11.4	271° -	+23.0	+11.6			TP				
	497		54° 37' 52"	-	9.8	91° 30'	+13.0	+22.8	6889.0		BS	-186	-461		
	497				9.7	268° 30'	+13.0	+22.7			BS				
764	173		44° 20'	-	4.9	92° 10'	-6.5	-11.4		6877.6		+92	+146	156,099	2,188,097
π	0				5.1	-		-5.1		6883.9	π	0	0	156,007	2,187,951
765	159		232° 30'	-	6.0	86° 40'	+9.2	+3.2		6892.2		-65	-145	155,942	2,187,806
766	488		228° 30'	+13.4	6.5	87° -	+25.5	+19.0		6908.0		-230	-430	155,777	2,187,521
767	818	817.1	229° 15'	-	8.5	87° 20'	+38.1	+29.6		6918.6		-375	-726	155,632	2,187,225
768	1148	1146.8	229° 50'	-	12.8	87° 20'	+53.4	+40.6		6929.6		-516	-1024	155,491	2,186,927
TP	1440	1438.4	229° 25' 28"	-	5.6	87° 20'	+67.0	+61.4		6950.4	TP	-657	-1280	155,350	2,186,671
TP	1440				5.5	272° 40'	+67.0	+61.5			TP				
	613	612.2	64° 05' 04"	+13.4	6.4	87° -	-32.1	-25.7	6924.7		BS	-133	-598		
	613				6.3	273° -	-32.1	-25.8			BS				
769	574		63° 30'	-	4.2	87° -	+30.0	+25.8		6950.5		+130	+559	155,347	2,186,632
770	247		62° -	-	6.1	86° -	+17.2	+11.1		6935.8		+62	+239	155,279	2,186,312
π	0				5.1	-		-5.1		6919.6	π	0	0	155,217	2,186,073
771	87		264° 30'	-	6.3	94° -	-6.1	-12.4		6912.3		+12	-86	155,229	2,185,987
772	413	412.0	253° 05'	-	9.3	94° -	-28.8	-38.1		6886.6		-25	-411	155,192	2,185,662

SURVEY NOTES-HIGH RESOLUTION DATA

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Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE			
10-24-85		B. Cotcamp		B. SALDIVAR		6834		B.C.W		7		59			
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER	
UTAM		SAN RAFAEL KNOB-15		UTAH		EMERY								W. Cassidy	
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	COORDINATES		REMARKS	
												NORTH + SOUTH - LAT.	EAST + WEST - DEP.		Y
									6924.7						
TP	503	501.8	250° 59' 11"	+13.4	6.7	94°	-35.1	-41.8		6882.9	TP	-49	-499	155.168	2,185,574
TP	503				6.6	266°	-35.1	-41.9			TP				
	1797	1795.9	84° 16' 36"		+5.9	88°	-62.7	-56.8	6826.1		BS	+240	-1780		
	1797				+5.8	272°	-62.7	-56.9			BS				
773	1575		80° 10'	-	10.2	88° 10'	+50.4	+40.2		6866.3		-98	+1572	155.310	2,185,366
774	1286		73° 55'	-	6.3	88° 50'	+26.2	+19.9		6846.0		+60	+1285	155.468	2,185,079
775	975		68° 20'	-	8.0	89°	+17.0	+9.0		6835.1		+140	+965	155.548	2,184,759
776	662		61° 10'	+13.4	13.0	89°	+11.6	-1.4		6824.7		+176	+638	155.584	2,184,432
777	334		63° 05'	-	9.4	-	-	-9.4		6816.7		+78	+325	155.486	2,184,119
778	36		141° 05'	-	12.5	-	-	-12.5		6813.7		-32	+16	155.376	2,183,810
X	0				5.1	-	-	-5.1		6821.0	X	0	0	155.408	2,183,794
779	315		250° 05'	-	10.3	92° 30'	-13.7	-24.0		6802.1		-36	-313	155.372	2,183,481
780	628		241° 25'	-	6.9	91° 30'	-16.4	-23.3		6802.8		-164	-606	155.244	2,183,188
781	937		232° 55'	+13.4	9.1	90° 30'	-8.2	-17.3		6808.8		-376	-858	155.032	2,182,936
782	1266		232° 10'	-	6.0	90° 30'	-11.0	-17.0		6809.1		-524	-1153	154.884	2,182,641
783	1584		234° -	-	10.1	90° 10'	-4.6	-14.7		6811.4		-609	-1462	154.799	2,182,332
784	1808		241° 45'	-	5.0	91° 14'	-38.9	-48.9		6782.2		-463	-1748	154.745	2,182,046
785	1929	1927.7	251° 10'	-	5.4	92° 06'	-70.7	-76.1		6750.0		-183	-1919	155.225	2,181,875
786	2028	2025.2	260° 10'	-	5.6	93° -	-106.1	-111.7		6714.4		+126	-2021	155.534	2,181,773
787	2229	2224.4	267° 20'	-	7.0	93° 40'	-142.5	-149.5		6676.6		+414	-2185	155.822	2,181,609

URVEY NOTES-HIGH RESOLUTION DATA

EO-445

Geosource Inc.

DATE		INSTRUMENT MAN		ROD MAN		PARTY NUMBER		NOTES CHECKED BY		LINE NO.		PAGE							
10-24-85		B. Cotcamp		B. SALDIVAR		6884		B.C. [initials]		7		60							
AREA		TOPO MAP		STATE		COUNTY		TWP		RANGE		PPM		PARTY MANAGER					
UTAH		SAN RAFAEL Knob-15		UTAH		EMERY								W. Cassidy					
STATION NO.	SLOPE DISTANCE	PLOTTING DISTANCE	AZIMUTH FROM MAGNETIC NORTH	DEC	ROD READING	VERTICAL ANGLE	VERTICAL CHANGE	DIFFERENCE IN ELEVATION	ELEVATION OF INSTRUMENT	ELEVATION OF STATION	BS X TP	NORTH + SOUTH -		EAST + WEST -		COORDINATES		REMARKS	
												LAT.	DEP.	Y	X				
									6826.1										
788	2337	2330.8	275 -	+13.4	6.9	94° 10'	-169.8	-176.7		6649.4		+736	-2212	156.144	2181.582				
789	2566	2559.2	280° 25'	-	4.0	94° 10'	-186.4	-190.4		6635.7		+1033	-2341	156.441	2181.453				
790	2872	2865.0	283° 05'	-	6.9	94 -	-200.3	-207.2		6618.9		+1278	-2564	156.686	2181.230				
791	3190	3182.4	284° 48'	-	5.0	93° 58'	-220.7	-225.7		6600.4		+1504	-2805	156.912	2180.989				
792	3507	3499.4	286° 15'	+13.4	5.1	93° 46'	-230.4	-235.4		6590.7		+1731	-3041	157.139	2180.753				
793	3815	3807.6	287° 58'	-	4.2	93° 34'	-237.3	-241.5		6584.6		+1982	-3251	157.396	2180.543				
794	4054	4046.7	291° 06'	-	5.1	93° 26'	-242.8	-247.9		6578.2		+2292	-3335	157.700	2180.459				
795	4277	4269.0	294° 06'	-	10.9	93° 30'	-261.1	-272.0		6559.1		+2599	-3387	158.007	2180.407				
796	4588	4579.1	295° 34'	-	9.8	93° 34'	-285.4	-295.2		6530.9		+2880	-3560	158.288	2180.234				E.O.L. Line #7
TP	3000	2994.9	81° 04' -	-	6.7	86° 40'	+174.4	+167.7			TP	-233	+2986	155.175	2186.780				
TP	3000				6.4	273° 20'	+174.4	+168.0	+167.93	6994.0	TP								TRaverse back to ELEVATION
	3301	3297.9	229° 28' 57"	+13.4	3.6	87° 30'	-144.0	-140.4			BS	+1503	+2935						
	3301				3.3	272° 30'	-144.0	-140.7	-140.5	6853.5	BS								
K	0				5.1	-		-5.1			K	0	0	156.678	2189.715				
TP	5723		99° 18' 28"	-	14.1	89° 56'	+6.7	-7.4		6846.1	TP	-2209	+5279	154.469	2194.994				
TP	5723				14.0	270° 04'	+6.7	-7.3			TP								
	442	439.2	23° 01' 09"	-	4.4	83° 30'	-50.0	-45.6		6800.5	BS	-353	-261						
	442				4.3	276° 30'	-50.0	-45.7			BS								
K	0				5.1	-		-5.1			K	0	0	154.116	2194.733				
IF	273		47° 33' 50"	-	3.8	-		-3.8		6796.7	IF	+133	+239	154.249	2194.972				Y=154.245 X=2194.970 IF - Inter El. 6796.7